Horticulture and Crop Science
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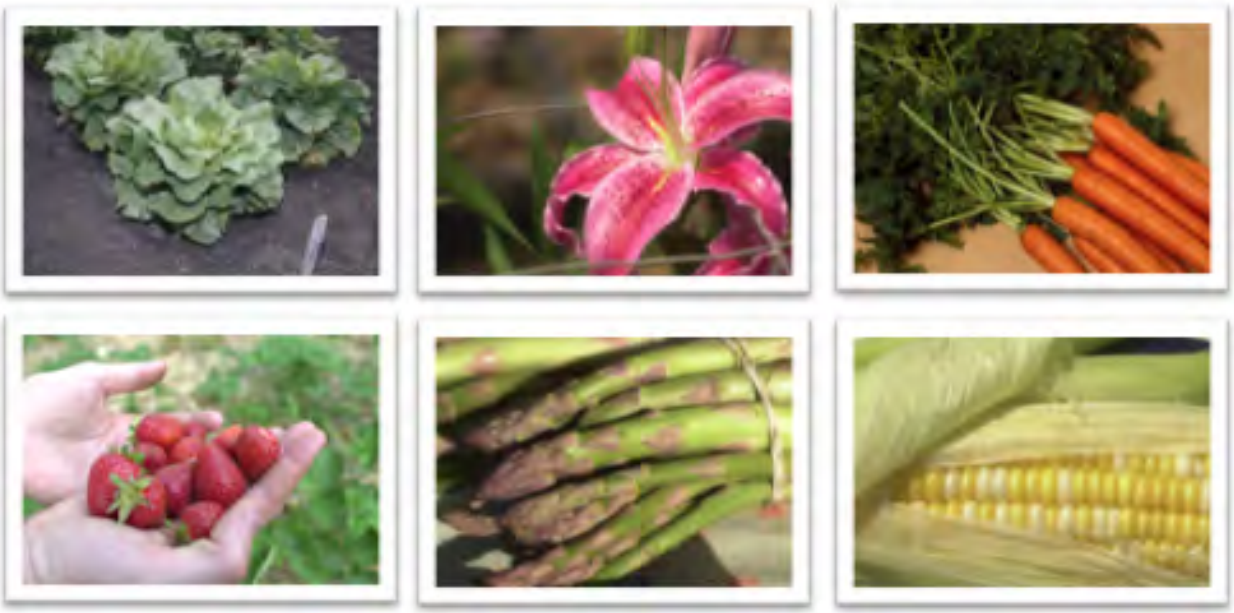
WEED MANAGEMENT IN HORTICULTURAL CROPS



RESEARCH RESULTS
2009

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The Ohio State University
Ohio Agricultural Research and Development Center
Ohio State Extension

This report contains the results of research on horticultural crop weed management in Ohio for 2009. This report and other resources are available on the Internet at: **www.oardc.ohio-state.edu/weedworkshop**

This bulletin does not constitute endorsement or specific recommendations. Apology is expressed for any inadvertent errors found in this report.

Final copies of commercial advertisement that will contain data from these results are subject to the author's approval before publication.

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A LIST OF CROP BAYER CODES USED IN THIS REPORT:

ALLCE = Green Onion
BRSOA = Collard
CUCURB* = Cucurbits ; (cucumbers, squash, pumpkins)
CUMSA = Cucumber
CUUPM = Squash
CUUSS = Pumpkin
CYAOV = Shagbark Hickory
FRXPS = Green Ash
LYPES = Tomato
MABSD = Apple
MUSGN* = Mustard Green
RUBSG = Brambles; (raspberries and blackberries)
VITLA = Grape

* not official Bayer Code.

A LIST OF ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT:

BURN = Necrotic tissue
CHLOROSIS = Yellow coloration or bleaching of foilage
CONTROL = Herbicide efficacy
DAT= Days after treatment
DOR = Dormant
DIAM = Diameter
DISTORT = Leaf distortion
GROWTH = Annual increase in length of shoot
IMMAT = Immature fruit
INJURY = Composite assessment of stunting, chlorosis, and other visible effects
LEAF CURL = Upward curling of leaf associated with herbicide injury
MKTB = Marketable fruit
MSP = Mid-spring
NO/PLOT = Number per plot
POST = Post emergent application; also LPOST, (late POST) and EPOST (early POST)
PRE = Pre emergent herbicide application
PRETP = Pre-transplant
STAND CT = Stand count
STEM TWIST = Distorted main stem caused by herbicide injury
STUNT = Reduction in height or growth
UNMKTB = Unmarketable fruit; green (tomatoes), diseased or cull
VEGETAT = Vegetative
WAT = Weeks after treatment

METHODS OF ASSESSING CROP INJURY, WEED CONTROL, AND DENSITY:

Unless otherwise stated, crop injury and weed control were assessed visually. The 0-100 linear scale was used, in which 0 = no crop injury/no control, and 100 = death of crop/complete weed control.

For weed density: LOW = Scattered, just a few weeds
MEDIUM = 1 weed per 3 feet of row
HIGH = More than 1 weed per 3 feet of row

A LIST OF WEEDS WITH BAYER CODES USED IN THIS REPORT:

BAYER CODE	COMMON NAME	BOTANICAL NAME
ABUTH	velvetleaf	*Abutilon theophrasti* Medicus
ACCVI	Virginia copperleaf	*Acalypha virginica* L.
AGRASS*	foxtail, crabgrass spp.	*Setaria, Digitaria* spp.
AGGRE	quackgrass	*Elytrigia repens* (L.) Nevski
AMABL	prostrate pigweed	*Amaranthus blitoides S. Wats.*
AMARE	redroot pigweed	*Amaranthus retroflexus* L.
AMAXX	pigweed spp.	*Amaranthus* spp.
AMBEL	common ragweed	*Ambrosia artemisiifolia* L.
APPCA	hemp dogbane	*Apocynum cannabinum* L.
ASTPI	white-heath aster	*Aster plosus* Willd.
CAGSE	hedge bindweed	*Calystegia sepium* (L.) R. Br.
CAPBP	shepherd's purse	*Capsella bursa-pastoris* (L.) Medicus
CARHI	hairy bittercress	*Cardamine pratensis* L.
CERVU	mouseear chickweed	*Cerastium vulgatum* L.
CHEAL	common lambsquarters	*Chenopodium album* L.
CIRAR	Canada thistle	*Cirsium arvense* (L.) Scop.
CYPES	yellow nutsedge	*Cyperus esculentes* L.
DACGL	orchardgrass	*Dactylis glomerata* L.
DAUCA	wild carrot	*Daucus carota* L.
DIGSA	large crabgrass	*Digitaria sanguinalis* (L.) Scop.
EPHMA	spotted spurge	*Euphorbia maculata* L.
ERIAN	annual fleabane	*Erigermannuus* (L.) Perp.
GLEHE	ground ivy	*Glechoma hederacea* L.
LAMPU	purple deadnettle	*Lamium purpureum* L.
LEPVI	Virginia pepperweed	*Lepidium virginicum* L.
MALNE	common mallow	*Malva neglecta* Wallr.
MOLVE	carpetweed	*Mollugo verticillata* L.
MORAL	white mulberry	*Morus alba* L.
MUHFR	wirestem muhly	*Muhlenbergia frondosa* (Poir.) Fern
MUHSC	nimblewill	*Muhlenbergia schreberi* J.F.Gmel
OXAST	yellow woodsorrel	*Oxalis stricta* L.
PANDI	fall panicum	*Panicum dichotomiflorum* Michx.

PLALA	buckhorn plantain	*Plantago lanceolata* L.
PLAMA	broadleaf plantain	*Plantago major* L.
POANN	annual bluegrass	*Poa annua* L.
POLAV	prostrate knotweed	*Polygonum aviculare* L.
POLPY	Pennsylvania smartweed	*Polygonum pensylvanicum* L.
POROL	common purslane	*Portulaca oleracea* L.
PRTQU	Virginia creeper	*Parthenocissus quinquifolia* (L.) Planch.
PRUVU	healall	*Prunella vulgaris* L.
RUBFR	bramble	*Rubus fruticosis* L.
RUMAA	red sorrel	*Rumex acetosella* L.
RUMOB	broadleaf dock	*Rumex obtusifolius* L.
SETFA	giant foxtail	*Setaria faberii* L.
SENVU	common groundsel	*Senecio vularis* L.
SOLPT	Eastern black nightshade	*Solanum ptycanthum* Dun.
SOOCA	Canada goldenrod	*Solidago canadensis* L.
STEME	common chickweed	*Stellaria media* (L.) Vill
TAROF	dandelion	*Taraxacum officinale* Weber in Wiggers
TOXRA	poison ivy	*Toxicodendron* radicans (L.) Ktze.
TRFPR	red clover	*Trifolium pratense* L.
TRFRE	white clover	*Trifolium repens* L.
VENAL	tall ironweed	*Vernonia altissima* Nutt.

* not official Bayer Code.

Note: Control ratings for species not present at herbicide application are provided. These species will be listed under “Weed Stage At Each Application”, but growth stage information is not available.

HERBICIDE LIST

TRADE NAME	COMMON NAME	FORMULATION	MANUFACTURER
Arsenal	Isopropylamine salt of imazapyr	28.7 EC	BASF
BAS 800 04H	saflufenacil	N/A	BASF
BCS-AA10717	N/A	200 SC	Bayer CropScience
Callisto	mesotrione	4.0 SC	Syngenta
Casoron	dichlobenil	4 G	Chemtura Corporation
Chateau	flumioxazin	51 WDG	Valent
Clarity	dicamba	4L	BASF
Command	clomozone	3L	FMC
Dual Magnum	s-metolachlor	7.62 EC	Syngenta
Escort	metsulfuron methyl	60WG	DuPont
Goaltender	oxyfluoren	4 L	Dow AgroSciences LLC
GWN-3404	N/A	N/A	Gowan Company
Karmex	diuron	80 DF	Griffin LLC
KJM-44	N/A	80WG	DuPont
Krenite S	fosamine asmmonium	4L	DuPont
MAT-28	N/A	50 SG	DuPont
Matrix	rimsulfuron	25 DF	DuPont
Outlook	dimethenamid	6 L	BASF
Prowl H_2O	pendimethalin	3.8 L	BASF
Reflex	fomesafen	2L	Syngenta
Rely	glufosinate ammonium	200 SL	Bayer CropScience
Roundup W/M	glyphosate	4.5 L	Monsanto
Sandea	halosulfuron-methyl	75 DF	Gowan Company
Select	clethodim	2 L	Valent
Sencor	metribuzin	75 DF	Bayer CropScience
Sinbar	terbacil	80 WP	DuPont
Spartan	sulfentrazone	75 DF	FMC Corporation
Stinger	clopyralid	3 L	Dow AgroSciences LLC
Surflan	oryzalin	4L	Dow AgroSciences LLC
Weedar 64	2, 4, -D amine	3.8L	NuFarm

ADJUVANT LIST

NAME	ABBREVIATION	DESCRIPTION
Ammonium sulfate	AMS	Spray grade fertilizer
Crop Oil Concentrate	COC	Paraffin base petroleum oil
Induce	NIS	Nonionic surfactant
MSO	MSO	Methylated seed oil
28% N	UAN	Urea ammonia nitrate

Daily Weather Summary for 4/1/2008 to 8/30/2008 at OARDC – Muck Crops Agricultural Research Station, Willard, Ohio 44890

Huron County, Latitude: 41° 01' N; Longitude: 82° 44' W.

APRIL				MAY				JUNE				JULY				AUGUST			
Date	Precip. (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp. °F	Max. Temp. °F
4/1/08	0.12	36	60	5/1/08	0	45	79	6/1/08	0	57	73	7/1/08	0	50	77	8/1/08	0	63	84
4/2/08	0	31	47	5/2/08	1.42	58	73	6/2/08	0	49	82	7/2/08	0	50	82	8/2/08	0	61	82
4/3/08	0.01	30	55	5/3/08	0.45	50	67	6/3/08	1.21	61	71	7/3/08	0.92	60	74	8/3/08	0	54	82
4/4/08	0.66	40	49	5/4/08	0	41	62	6/4/08	0.11	63	77	7/4/08	0	56	75	8/4/08	0	57	83
4/5/08	0	35	57	5/5/08	0	43	71	6/5/08	0.01	68	88	7/5/08	0	57	79	8/5/08	0	68	82
4/6/08	0	34	66	5/6/08	0	46	76	6/6/08	0	72	91	7/6/08	0	55	87	8/6/08	0	67	84
4/7/08	0	49	70	5/7/08	0.1	59	76	6/7/08	0	72	84	7/7/08	0	62	86	8/7/08	0.01	59	79
4/8/08	0	40	74	5/8/08	0.63	46	61	6/8/08	0	75	93	7/8/08	0.84	68	88	8/8/08	0	55	76
4/9/08	0.09	42	65	5/9/08	0.12	47	57	6/9/08	0.31	66	93	7/9/08	0.61	64	81	8/9/08	0.2	50	79
4/10/08	0.01	36	57	5/10/08	0.02	42	65	6/10/08	0.78	63	75	7/10/08	0	55	82	8/10/08	0.26	56	72
4/11/08	0.39	50	68	5/11/08	0.32	50	59	6/11/08	0	58	85	7/11/08	0	64	85	8/11/08	0	53	74
4/12/08	0.04	39	49	5/12/08	0.11	42	53	6/12/08	0	65	87	7/12/08	0.65	67	85	8/12/08	0	50	79
4/13/08	0.12	34	40	5/13/08	0.59	36	67	6/13/08	0.91	68	88	7/13/08	0.02	65	79	8/13/08	0.07	55	79
4/14/08	0.01	30	48	5/14/08	0.09	52	59	6/14/08	0.14	65	80	7/14/08	0	54	81	8/14/08	0.24	57	76
4/15/08	0	27	57	5/15/08	0.03	46	58	6/15/08	0.13	58	84	7/15/08	0	53	84	8/15/08	0	55	76
4/16/08	0	37	67	5/16/08	0.23	47	65	6/16/08	0.01	59	77	7/16/08	0	59	88	8/16/08	0	50	79
4/17/08	0	45	76	5/17/08	0.01	49	70	6/17/08	0	51	69	7/17/08	0	67	88	8/17/08	0	53	82
4/18/08	0	48	78	5/18/08	0.49	47	59	6/18/08	0	52	65	7/18/08	0	64	89	8/18/08	0	55	84
4/19/08	0.21	47	70	5/19/08	0	41	61	6/19/08	0	47	73	7/19/08	0	66	88	8/19/08	0	55	76
4/20/08	0.05	50	64	5/20/08	0	47	62	6/20/08	0	50	82	7/20/08	0.54	67	85	8/20/08	0	48	81
4/21/08	0	41	73	5/21/08	0	42	59	6/21/08	0.38	59	84	7/21/08	0.72	67	86	8/21/08	0	51	88
4/22/08	0	53	76	5/22/08	0.02	46	58	6/22/08	0.2	57	77	7/22/08	0.05	66	83	8/22/08	0	65	89
4/23/08	0	52	77	5/23/08	0	40	64	6/23/08	0.01	55	75	7/23/08	0	59	73	8/23/08	0	57	89
4/24/08	0	45	74	5/24/08	0	38	67	6/24/08	0	55	78	7/24/08	0	55	80	8/24/08	0.05	63	90
4/25/08	0.03	57	84	5/25/08	0	36	77	6/25/08	0.62	55	81	7/25/08	0	55	82	8/25/08	0	53	75
4/26/08	0.08	46	72	5/26/08	0.05	61	83	6/26/08	0.29	67	86	7/26/08	0.09	62	85	8/26/08	0	49	80
4/27/08	0	38	65	5/27/08	0	44	68	6/27/08	0	66	85	7/27/08	0	56	80	8/27/08	0.33	58	66
4/28/08	0.11	43	53	5/28/08	0	37	62	6/28/08	0.07	68	81	7/28/08	0	59	82	8/28/08	0.03	60	67
4/29/08	0.05	37	52	5/29/08	0	34	75	6/29/08	0	62	78	7/29/08	0	58	87	8/29/08	0.08	62	85
4/30/08	0	30	56	5/30/08	0.02	54	84	6/30/08	0.05	55	68	7/30/08	0.01	69	85	8/30/08	0	61	83
4/1/08	0.12	36	60																

Daily Weather Summary for 4/1/2008 to 8/31/2008 at OARDC, Wooster, Ohio 44691

Wayne County, one mile south of Wooster; Latitude: 40° 47' N; Longitude: 81° 55' W; Elevation: 1020 ft.

APRIL				MAY				JUNE				JULY				AUGUST			
Date	Precip (in)	Min. Temp °F	Max. Temp. °F	Date	Precip (in)	Min. Temp °F	Max. Temp. °F	Date	Precip (in)	Min. Temp °F	Max. Temp °F	Date	Precip (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp °F	Max. Temp °F
4/1/08	0.13	37	61	5/1/08	0	42	77	6/1/08	0	50	74	7/1/08	0	50	77	8/1/08	0	63	84
4/2/08	0	33	47	5/2/08	0.31	61	79	6/2/08	0	46	80	7/2/08	0	50	82	8/2/08	0	61	82
4/3/08	0.04	31	55	5/3/08	0.38	51	68	6/3/08	0.57	59	70	7/3/08	0.92	60	74	8/3/08	0	54	82
4/4/08	0.13	39	59	5/4/08	0	43	65	6/4/08	0.27	65	76	7/4/08	0	56	75	8/4/08	0	57	83
4/5/08	0	33	56	5/5/08	0	38	71	6/5/08	0.02	66	88	7/5/08	0	57	79	8/5/08	0	68	82
4/6/08	0	33	67	5/6/08	0.01	45	77	6/6/08	0	68	90	7/6/08	0	55	87	8/6/08	0	67	84
4/7/08	0	45	72	5/7/08	0.08	55	77	6/7/08	0	73	84	7/7/08	0	62	86	8/7/08	0.01	59	79
4/8/08	0	41	77	5/8/08	0.3	50	61	6/8/08	0	74	90	7/8/08	0.84	68	88	8/8/08	0	55	76
4/9/08	0	44	67	5/9/08	0.24	49	65	6/9/08	0	67	90	7/9/08	0.61	64	81	8/9/08	0.2	50	79
4/10/08	0	34	64	5/10/08	0.07	43	67	6/10/08	0.44	61	80	7/10/08	0	55	82	8/10/08	0.26	56	72
4/11/08	0.28	53	72	5/11/08	0.48	48	58	6/11/08	0	55	86	7/11/08	0	64	85	8/11/08	0	53	74
4/12/08	0.02	39	54	5/12/08	0.15	41	52	6/12/08	0	62	88	7/12/08	0.65	67	85	8/12/08	0	50	79
4/13/08	0.06	34	44	5/13/08	0	34	69	6/13/08	0.73	68	89	7/13/08	0.02	65	79	8/13/08	0.07	55	79
4/14/08	0	32	49	5/14/08	0.01	46	58	6/14/08	0.18	60	81	7/14/08	0	54	81	8/14/08	0.24	57	76
4/15/08	0	23	57	5/15/08	0	46	63	6/15/08	0.13	55	83	7/15/08	0	53	84	8/15/08	0	55	76
4/16/08	0	30	69	5/16/08	0.09	47	63	6/16/08	0.07	60	78	7/16/08	0	59	88	8/16/08	0	50	79
4/17/08	0	38	73	5/17/08	0.11	47	69	6/17/08	0	52	69	7/17/08	0	67	88	8/17/08	0	53	82
4/18/08	0	42	80	5/18/08	0.1	46	60	6/18/08	0	50	65	7/18/08	0	64	89	8/18/08	0	55	84
4/19/08	0.3	47	74	5/19/08	0	40	60	6/19/08	0.04	47	71	7/19/08	0	66	88	8/19/08	0	55	76
4/20/08	0.14	50	66	5/20/08	0	45	62	6/20/08	0	50	81	7/20/08	0.54	67	85	8/20/08	0	48	81
4/21/08	0	48	72	5/21/08	0	41	58	6/21/08	0.25	56	82	7/21/08	0.72	67	86	8/21/08	0	51	88
4/22/08	0	47	74	5/22/08	0	42	57	6/22/08	1.07	53	77	7/22/08	0.05	66	83	8/22/08	0	65	89
4/23/08	0	53	76	5/23/08	0	38	64	6/23/08	0.56	52	73	7/23/08	0	59	73	8/23/08	0	57	89
4/24/08	0	39	74	5/24/08	0	38	67	6/24/08	0	50	79	7/24/08	0	55	80	8/24/08	0.05	63	90
4/25/08	0	55	81	5/25/08	0	37	75	6/25/08	0.5	54	82	7/25/08	0	55	82	8/25/08	0	53	75
4/26/08	0	45	70	5/26/08	0.02	52	81	6/26/08	0.41	66	87	7/26/08	0.09	62	85	8/26/08	0	49	80
4/27/08	0	37	66	5/27/08	0	46	69	6/27/08	0	64	85	7/27/08	0	56	80	8/27/08	0.33	58	66
4/28/08	0.24	39	51	5/28/08	0	39	67	6/28/08	0.47	66	81	7/28/08	0	59	82	8/28/08	0.03	60	67
4/29/08	0.05	37	51	5/29/08	0	34	76	6/29/08	0.06	63	79	7/29/08	0	58	87	8/29/08	0.08	62	85
4/30/08	0	31	56																
4/1/08	0.13	37	61																

Daily Weather Summary for 4/1/2009 to 8/31/2009 at OARDC - Muck Crops Agricultural Research Station, Willard, Ohio 44890
Huron County, Latitude: 41° 01' N; Longitude: 82° 44' W.

APRIL				MAY				JUNE				JULY				AUGUST			
Date	Precip (in)	Min. Temp °F	Max. Temp. °F	Date	Precip (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip (in)	Min. Temp °F	Max. Temp °F	Date	Precip (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp °F	Max. Temp °F
4/1/09	0.01	37.7	60.7	5/1/09	0.22	49.6	72.1	6/1/09	0.69	51.8	78.9	7/1/09	0	57.5	72.3	8/1/09	0	56.9	80.7
4/2/09	0	34.3	70.6	5/2/09	0	41	62.2	6/2/09	0.19	54.2	65.3	7/2/09	0.03	56.1	67.6	8/2/09	0	59	76.1
4/3/09	0.26	35.7	63.1	5/3/09	0	42.9	67.5	6/3/09	0.13	49.8	57.5	7/3/09	0	56.9	74.3	8/3/09	0	52.2	79.4
4/4/09	0	33.3	52.7	5/4/09	0	47.4	69.7	6/4/09	0	43.1	63.8	7/4/09	0	54.3	73	8/4/09	0	67.3	81.7
4/5/09	0.11	28.8	59.8	5/5/09	0	47.2	67.2	6/5/09	0	42.5	73.1	7/5/09	0	57	81.1	8/5/09	0	58.9	78.1
4/6/09	0.13	32.5	39.2	5/6/09	0.32	43.7	63.6	6/6/09	0	50.6	81.5	7/6/09	0	55	81.4	8/6/09	0	52.6	78.5
4/7/09	0	28.3	36.4	5/7/09	0.03	46.6	68.8	6/7/09	0	59.2	85.2	7/7/09	0	56.3	79.7	8/7/09	0	52.3	80
4/8/09	0	31.1	51.9	5/8/09	0.11	56.1	69.3	6/8/09	0.02	62.6	82.5	7/8/09	0	48	78	8/8/09	0.04	63	79.3
4/9/09	0	27.6	60	5/9/09	0	51.9	66.7	6/9/09	0	63.4	81.3	7/9/09	0	54.8	82.8	8/9/09	0	71.6	91.4
4/10/09	0.08	38.4	49.9	5/10/09	0	42.8	63.1	6/10/09	0	55.5	73.2	7/10/09	0.01	54.7	86	8/10/09	0	71.2	91.1
4/11/09	0	28.9	48.8	5/11/09	0.01	42.5	62	6/11/09	0.55	60.4	71.5	7/11/09	0.12	65.5	82.3	8/11/09	0	68.8	83.8
4/12/09	0	23.4	49.2	5/12/09	0	35.2	66.6	6/12/09	0	54.9	72.3	7/12/09	0	54.1	81.5	8/12/09	0	60.6	80.3
4/13/09	0.3	32.6	48.2	5/13/09	0.16	50.7	67.5	6/13/09	0.06	48.4	74.3	7/13/09	0	49.2	78.1	8/13/09	0	53.6	82.9
4/14/09	0.3	43.3	51.9	5/14/09	0.25	52.4	71.9	6/14/09	0	52.5	77.2	7/14/09	0	47.2	77.3	8/14/09	0	56.5	86
4/15/09	0.09	40.5	47.6	5/15/09	0	42.1	77.9	6/15/09	0	53.4	80.3	7/15/09	0	59.9	85.7	8/15/09	0	59.7	86.9
4/16/09	0	29.8	59.1	5/16/09	0.11	47	72.4	6/16/09	0	53.9	81.7	7/16/09	0	62	84.2	8/16/09	0	62.3	92
4/17/09	0	30.4	68.2	5/17/09	0	38	61.1	6/17/09	0.15	65.3	84.2	7/17/09	0	60.8	76.4	8/17/09	0.83	67.3	90.1
4/18/09	0	35	74.5	5/18/09	0	30.5	64.2	6/18/09	0.01	63.2	77.7	7/18/09	0	55.2	72.7	8/18/09	0.01	70.1	84.8
4/19/09	0.37	50.7	57.8	5/19/09	0	39	75.5	6/19/09	1.87	62.6	83.3	7/19/09	0	49.9	75.3	8/19/09	0.26	66.7	85.1
4/20/09	0.49	43.7	57.7	5/20/09	0	44.1	84.2	6/20/09	0.35	68.6	82.1	7/20/09	0.21	50.2	80.8	8/20/09	1.07	68.4	83.9
4/21/09	0.05	39.8	49.7	5/21/09	0	51.3	87.2	6/21/09	0	62.3	79.6	7/21/09	0.01	56.5	82	8/21/09	0	65.4	78.4
4/22/09	0	36.9	55.4	5/22/09	0	56.8	73.7	6/22/09	0	57.7	83.1	7/22/09	0.38	63.4	71.2	8/22/09	0	57.8	69.4
4/23/09	0	33.6	60.6	5/23/09	0	50	88.3	6/23/09	0	60.7	85.2	7/23/09	1.2	62	74.1	8/23/09	0	54.2	69.7
4/24/09	0	48.1	86	5/24/09	0	55.7	82.3	6/24/09	0	63.2	90	7/24/09	0.01	57.6	78.9	8/24/09	0	57.8	78.6
4/25/09	0	63.8	87	5/25/09	0	52.8	75.9	6/25/09	0.63	67.7	94.8	7/25/09	0.29	63.8	76.8	8/25/09	0	54.2	81.2
4/26/09	0	61.6	86.5	5/26/09	1.47	55.8	79.6	6/26/09	0.01	65.7	82.7	7/26/09	0.05	61.7	78.7	8/26/09	0	60	82
4/27/09	0	60.9	85.8	5/27/09	0.73	66.8	79.7	6/27/09	0	57.3	81.5	7/27/09	0.01	59.2	81.9	8/27/09	0	60.8	74.2
4/28/09	0.18	44.6	66.9	5/28/09	0.43	58.9	72.1	6/28/09	0.01	62.2	85.1	7/28/09	0	63.2	84.3	8/28/09	0.3	59.3	79.5
4/29/09	0.01	45.4	61.9	5/29/09	0	53.8	76	6/29/09	0	57.3	80.3	7/29/09	0.16	63.8	77.4	8/29/09	0.3	55.2	73
4/30/09	0.36	52.6	68.3	5/30/09	0	48.2	74.3	6/30/09	0	57.3	71.4	7/30/09	0.01	58.8	79.5	8/30/09	0	49.7	65.9
4/1/09	0.01	37.7	60.7	5/31/09	0	48.9	69	6/1/09	0.69	51.8	78.9	7/31/09	0.75	62.4	78.9	8/31/09	0	42.9	68.7

Daily Weather Summary for 4/1/2009 to 8/31/2009 at OARDC – North Central Agricultural Research Station, Fremont, Ohio 43420
Sandusky County, Latitude: 41° 21' N; Longitude: 83° 07' W; Elevation: 636 ft.

APRIL				MAY				JUNE				JULY				AUGUST			
Date	Precip (in)	Min. Temp °F	Max. Temp. °F	Date	Precip (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip (in)	Min. Temp °F	Max. Temp °F	Date	Precip (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp °F	Max. Temp °F
4/1/09	0.02	40.7	60.6	5/1/09	0.02	50.9	71.8	6/1/09	0.17	52.3	82.1	7/1/09	0.01	59.7	74.3	8/1/09	0	58.2	82.4
4/2/09	0	41.5	68.6	5/2/09	0.01	40.7	64.5	6/2/09	0.09	54.3	65.6	7/2/09	0.03	57.8	72.2	8/2/09	0.01	59.9	77.8
4/3/09	0.37	36.2	62.6	5/3/09	0	44.4	68.5	6/3/09	0	48.6	60.3	7/3/09	0	59.1	76.6	8/3/09	0	54.9	83
4/4/09	0	34	54	5/4/09	0	48.1	63.4	6/4/09	0	44	63.8	7/4/09	0	55.4	74.4	8/4/09	0	68.1	83.4
4/5/09	0.29	32.8	54.1	5/5/09	0	45.1	66.5	6/5/09	0	45	73.6	7/5/09	0	58.3	82.1	8/5/09	0	61.1	77.4
4/6/09	0.1	34.1	40.5	5/6/09	0.07	43.5	68.5	6/6/09	0	52.5	82.1	7/6/09	0	55.9	83.3	8/6/09	0	52.6	78.8
4/7/09	0	29.8	37.4	5/7/09	0.09	43.7	69.7	6/7/09	0	58.2	85.5	7/7/09	0	58	80.9	8/7/09	0	55	80.4
4/8/09	0	31.2	53.6	5/8/09	0.1	56.3	73	6/8/09	0.06	63.4	84.8	7/8/09	0	51.8	76.6	8/8/09	0.13	64.3	81.8
4/9/09	0	30.3	60.3	5/9/09	0	51.3	66.5	6/9/09	0	63.3	79.8	7/9/09	0	57.1	79.4	8/9/09	0	73.1	94.1
4/10/09	0.04	37.7	44.7	5/10/09	0	43	64.1	6/10/09	0.06	58.2	68.7	7/10/09	0	57.6	88.5	8/10/09	0	72.8	91.2
4/11/09	0	32.6	49.5	5/11/09	0	45.5	62.8	6/11/09	0.19	61.6	73.6	7/11/09	0.36	66.2	86.1	8/11/09	0.03	68.5	85.7
4/12/09	0	25.6	47.7	5/12/09	0	38.5	67.3	6/12/09	0	56.4	73.3	7/12/09	0	56	82.1	8/12/09	0	61.6	79
4/13/09	0.12	33.6	48	5/13/09	0.12	48	66.8	6/13/09	0.05	50.4	73.8	7/13/09	0	51.8	80.5	8/13/09	0	57.1	83.1
4/14/09	0.37	40.7	48.9	5/14/09	0.97	53.6	71.7	6/14/09	0	54.2	80	7/14/09	0	50.8	76.5	8/14/09	0	55	87.9
4/15/09	0.03	37.8	46.9	5/15/09	0	45.7	78.5	6/15/09	0	56.9	76.6	7/15/09	0	58.7	86.8	8/15/09	0	61.3	89.8
4/16/09	0	30.3	60.8	5/16/09	0.01	48.6	71.3	6/16/09	0	54.1	78.1	7/16/09	0	65.9	85	8/16/09	0	65.4	93.8
4/17/09	0	32.1	70.9	5/17/09	0	38.6	60.7	6/17/09	0.12	65.4	82.4	7/17/09	0	61.4	78	8/17/09	0.19	71	92.1
4/18/09	0	38.8	75.2	5/18/09	0	35.6	65.1	6/18/09	0	64.5	79.7	7/18/09	0	59.1	74.4	8/18/09	0.01	69.7	85.7
4/19/09	0.28	46.3	60.1	5/19/09	0	45.4	76.3	6/19/09	2.6	63.2	82.9	7/19/09	0	51.4	77.9	8/19/09	0	65	87.9
4/20/09	0.3	43.7	58.2	5/20/09	0	49	87.5	6/20/09	0.02	68.5	84.3	7/20/09	0	54.1	81.7	8/20/09	0.03	68.9	86.2
4/21/09	0.07	39.7	51.7	5/21/09	0	57.1	87.7	6/21/09	0	64.5	81.2	7/21/09	0	56.4	80.6	8/21/09	0.06	66.3	82.2
4/22/09	0	37.6	56.3	5/22/09	0	58.1	70.8	6/22/09	0	61.8	83.1	7/22/09	0.15	62.7	70.5	8/22/09	0.14	61.5	70.6
4/23/09	0	33	61.7	5/23/09	0	50.3	85.8	6/23/09	0	62.5	86.4	7/23/09	0.95	63.9	77.9	8/23/09	0	60.4	74.1
4/24/09	0	48.5	87.3	5/24/09	0	55.7	73.5	6/24/09	0	66.3	93	7/24/09	0	59.6	81.4	8/24/09	0	57.4	79.9
4/25/09	0	65.3	86.4	5/25/09	0	56.7	67.9	6/25/09	0.56	69.9	94.8	7/25/09	0.14	67	79.2	8/25/09	0	55.6	86.1
4/26/09	0	62.7	86.3	5/26/09	0.15	59	74.9	6/26/09	0	68	83.3	7/26/09	0	63.4	80.8	8/26/09	0	61.3	84.4
4/27/09	0	64.2	85.2	5/27/09	1.8	63.4	83.8	6/27/09	0	61.1	81.4	7/27/09	0	59	83.9	8/27/09	0	59	70.2
4/28/09	0.5	46.4	69.8	5/28/09	0.17	59.2	75	6/28/09	0.02	64.3	86.2	7/28/09	0	66.3	86.3	8/28/09	0.4	59.2	74.1
4/29/09	0.03	46.4	57.3	5/29/09	0	55	77.5	6/29/09	0	59.6	81.1	7/29/09	0.49	66.8	80	8/29/09	0.23	54.6	74.9
4/30/09	0.52	48.3	69.2	5/30/09	0	48.1	75.6	6/30/09	0	58.4	74.1	7/30/09	0	57.6	80.5	8/30/09	0	51.6	68.1
4/1/09	0.02	40.7	60.6	5/31/09	0	50.5	68.3	6/1/09	0.17	52.3	82.1	7/31/09	0	63.3	81.4	8/31/09	0	49.7	70.3

Daily Weather Summary for 4/1/2009 to 8/31/2009 at OARDC, Wooster, Ohio 44691

Wayne County, one mile south of Wooster; Latitude: 40° 47' N; Longitude: 81° 55' W; Elevation: 1020 ft.

APRIL				MAY				JUNE				JULY				AUGUST			
Date	Precip (in)	Min. Temp °F	Max. Temp. °F	Date	Precip (in)	Min. Temp °F	Max. Temp. °F	Date	Precip (in)	Min. Temp °F	Max. Temp °F	Date	Precip (in)	Min. Temp. °F	Max. Temp. °F	Date	Precip. (in)	Min. Temp °F	Max. Temp °F
4/1/09	0.21	43.1	59.9	5/1/09	0.93	49.2	74.2	6/1/09	0.61	40.9	77.9	7/1/09	0	55	70.6	8/1/09	0.03	55.1	80.8
4/2/09	0	33.4	70.9	5/2/09	0	44.6	62.1	6/2/09	0.03	57.8	70.8	7/2/09	0.06	57.2	67.3	8/2/09	0.36	58.2	75.9
4/3/09	0.51	37.1	60.7	5/3/09	0	43.5	68.4	6/3/09	0.37	50.8	58	7/3/09	0	60.3	73.1	8/3/09	0	51.9	80
4/4/09	0	34.3	52	5/4/09	0	48.8	68.5	6/4/09	0	41.2	68	7/4/09	0	53.1	72.8	8/4/09	0	65.2	80.8
4/5/09	0.02	30	60	5/5/09	0	45.3	65.9	6/5/09	0	43.4	73.5	7/5/09	0	56	79.9	8/5/09	0	55.7	77.3
4/6/09	0.08	31.4	45.1	5/6/09	0.34	44.3	58	6/6/09	0	43.4	80.1	7/6/09	0	53.9	81.2	8/6/09	0	50.1	76.3
4/7/09	0.06	27.7	35.8	5/7/09	0	50.5	69.2	6/7/09	0	53.7	82.5	7/7/09	0	53.7	78.1	8/7/09	0	52	79.2
4/8/09	0	31.9	52.3	5/8/09	0.02	57	70.5	6/8/09	0.1	61.2	80	7/8/09	0	47.9	77.3	8/8/09	0	63.3	77.7
4/9/09	0	27.5	58.7	5/9/09	0.65	51.8	70	6/9/09	0	63.2	80.7	7/9/09	0	52.1	81.4	8/9/09	0.01	70.6	89.2
4/10/09	0.41	41	49.2	5/10/09	0	44.3	62	6/10/09	0.03	55.5	76.9	7/10/09	0	54	85.3	8/10/09	2.38	68.7	88.2
4/11/09	0	31.2	48.6	5/11/09	0	39.8	63.3	6/11/09	0.05	58.7	72.8	7/11/09	0.17	66.3	81	8/11/09	0.01	67.3	82.8
4/12/09	0	25.7	49.1	5/12/09	0	33.4	67.2	6/12/09	0.01	54.8	73.5	7/12/09	0	55.1	80.8	8/12/09	0	60.7	79.1
4/13/09	0.15	33.6	49.9	5/13/09	0.27	44.1	67.8	6/13/09	0	48.3	76.3	7/13/09	0	52.7	77.5	8/13/09	0	56.3	83.9
4/14/09	0.42	43.4	50.7	5/14/09	0.14	50.5	72.8	6/14/09	0	49.8	77.8	7/14/09	0	48.6	77.6	8/14/09	0	60.2	87.6
4/15/09	0.35	44.4	49.5	5/15/09	0	42.6	80	6/15/09	0	51.8	80.3	7/15/09	0	54.8	85.1	8/15/09	0	61	85.5
4/16/09	0	31.4	62.5	5/16/09	0.06	50.8	74.8	6/16/09	0	50.7	82.4	7/16/09	0	63.6	84.5	8/16/09	0	62.6	89.4
4/17/09	0	31	68.1	5/17/09	0	36.8	58.1	6/17/09	0.94	64.3	79.2	7/17/09	0.34	56.6	78.6	8/17/09	0	64.4	89.8
4/18/09	0	34.5	73.2	5/18/09	0	30.5	61.8	6/18/09	0.02	61.7	75.4	7/18/09	0	53.4	71.8	8/18/09	0.03	69.7	83.1
4/19/09	0.17	52.4	67.1	5/19/09	0	33.1	75.2	6/19/09	1.11	58.8	85.7	7/19/09	0	51.9	73.3	8/19/09	0.07	68.1	85.1
4/20/09	0.68	43.6	63.3	5/20/09	0	40.2	82.3	6/20/09	0.06	69.3	82.1	7/20/09	0	50.6	78.7	8/20/09	1.96	66.4	84.1
4/21/09	0.01	38.9	53.6	5/21/09	0	46.4	84.3	6/21/09	0	62.7	79.1	7/21/09	0	55.6	82	8/21/09	0.04	66.4	79.2
4/22/09	0.22	36.2	53.1	5/22/09	0	52.1	80.8	6/22/09	0	57	82.8	7/22/09	0.19	57.7	73.5	8/22/09	0	59	73.9
4/23/09	0.01	32.3	61.8	5/23/09	0	49.8	85.3	6/23/09	0	58.5	83.8	7/23/09	0.55	59.7	73.3	8/23/09	0	56.9	69.5
4/24/09	0	43.3	83.4	5/24/09	0	55.7	82.8	6/24/09	0	59.5	88.7	7/24/09	0	56.1	79.4	8/24/09	0	54.3	77.8
4/25/09	0	66.9	84.9	5/25/09	0	55.7	78.2	6/25/09	0.38	65.4	91.1	7/25/09	0.07	58.5	76.2	8/25/09	0	52.3	82.7
4/26/09	0	55.9	84.2	5/26/09	0.25	58.2	78.8	6/26/09	0	61.2	83.5	7/26/09	0	62.5	79.3	8/26/09	0	58.2	81.6
4/27/09	0	56.3	83.9	5/27/09	0.01	66	81.5	6/27/09	0	55.3	81.1	7/27/09	0	58.9	81.6	8/27/09	0	65.1	77.7
4/28/09	0.04	45.1	72.1	5/28/09	0.52	61	76.7	6/28/09	0.03	58.4	82.6	7/28/09	0.01	59.5	84.4	8/28/09	0.74	63.3	77.3
4/29/09	0	45.9	64.4	5/29/09	0	54.3	74.9	6/29/09	0	55.1	77.8	7/29/09	0.52	64.5	76.5	8/29/09	0.24	60.4	73.5
4/30/09	0.02	48.8	68.1	5/30/09	0	49.6	73.5	6/30/09	0	58.2	72.8	7/30/09	0.01	61.8	79.2	8/30/09	0	48.8	64.2
4/1/09	0.21	43.1	59.9	5/31/09	0	48.6	64.7	6/1/09	0.61	40.9	77.9	7/31/09	0.98	60.6	80.6	8/31/09	0	43.6	69.1

The Ohio State University

APPLES - SPRING APPLICATION TIMINGS OF MATRIX AND WEED CONTROL

Trial ID: APPSPRTIMGMATW 2009
Location: Wooster, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Objective: To evaluate the efficacy of Matrix tank mixes on perennial and annual weed control when applied at two different spring timings; dormant (DOR), and mid-spring (MSP).

TRIAL SUMMARY: The Matrix tank mixes applied during the dormant stage provide superior weed control over the mid-spring timing. At 90 days after treatment (DAT) , the Matrix + Karmex treatment had the best weed control of the two dormant tank mixes.

TRIAL LOCATION

City: Wooster
State/Prov.: OH
Postal Code: 44691
Country: USA

Trial Status: Final
Trial Reliability: Reliable
Initiation Date: 04/02/09
Planned Completion Date: 08/30/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	AGGRE	quackgrass	*Elytrigia repens L.*
2	AMBEL	common ragweed	*Ambrosia artemisiifolia L.*
3	CAGSE	bindweed	*Calystegia sepium L.*
4	CARHI	bittercress	*Plantago lanceolata L.*
5	CHEAL	lambsquarter	*Chenopodium album L.*
6	CIRAR	thistle	*Cirsium arvense L.*
7	ERICA	horseweed	*Konya canadensis L.*
8	LEPVI	Virginia pepperweed	*Lepidium virginicum L.*
9	PLALA	buckhorn plantain	*Plantago lanceolata L.*
10	POAAN	annual bluegrass	*Poa annua L.*
11	POLPY	smartweed	*Polygonum pensylvanicum L.*
12	RUBFR	bramble	*Rubus fruticosis L.*
13	RUMAA	red sorrel	*Rumex acetosella L.*
14	RUMOB	broadleaf dock	*Rumex obtusifolius L.*
15	SETFA	giant foxtail	*Setaria faberii L.*
16	TAROF	dandelion	*Taraxacum officinale Weber in Wiggers*
17	TRFRE	white clover	*Trifolium repens L.*

Crop 1: MABSD APPLE
Planting Date: 01/01/07
Row Spacing: 10 FT
Perennial Age: 2 YR

Variety: TRANSPARENT
Planting Method: CONVENTIONAL
Spacing Within Row: 10 FT

SITE AND DESIGN

Plot Width, Unit: 6 FT
Site Type: HILLSIDE
Tillage Type: NONE

Plot Length, Unit: 15 FT
Reps: 3
Study Design: RANDOMIZED COMPLETE BLOCK

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APPLES - SPRING APPLICATION TIMINGS OF MATRIX AND WEED CONTROL

Trial ID: APPSPRTIMGMATW 2009
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SOIL DESCRIPTION

% Sand: 16	% OM: 3.11	Texture: SILT LOAM
% Silt: 72	pH: 6	Soil Name: WOOSTER SILT LOAM
% Clay: 12	CEC: 14	Fert. Level: MODERATE

APPLICATION DESCRIPTION

	A	B
Application Date:	4/2/2009	5/12/2009
Time of Day:	1-2 PM	3-4 PM
Application Method:	SPRAY	SPRAY
Application Timing:	DORMANT	MIDSPRING
Applic. Placement:	DIRECTED	DIRECTED
Air Temp., Unit:	66.1 F	64.8 F
% Relative Humidity:	34.9	42.4
Wind Velocity, Unit:	6.6 MPH	5.5 MPH
Dew Presence (Y/N):	N	N
Soil Moisture:	MOIST	DRY
% Cloud Cover:	20	70

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	MABSD; DORMANT	MABSD; MIDSPRING
Stage Scale:	DORMANT	VEGETATIVE
Height, Unit:	6 FT	6 FT

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AGGRE; DORMANT	AGGRE; MIDSPRING
Stage Scale:	3-8 IN	11 IN
Density, Unit:	LOW; PLOT	LOW; PLOT
Weed 2 Code, Stage:	AMBEL; DORMANT	AMBEL; MIDSPRING
Stage Scale:	COTYLEDON	1.5 IN
Density, Unit:	LOW ; PLOT	LOW; PLOT
Weed 3 Code, Stage:	CAGSE; DORMANT	CAGSE; MIDSPRING
Stage Scale:	.	15 IN
Density, Unit:	. .	MEDIUM; PLOT
Weed 4 Code, Stage:	CARH; I DORMANT	CARHI; MIDSPRING
Stage Scale:	0.5 IN	6 IN
Density, Unit:	MEDIUM; PLOT	MEDIUM; PLOT
Weed 5 Code, Stage:	CHEAL ; DORMANT	CHEAL; MIDSPRING
Stage Scale:	COTYLEDON	3 IN
Density, Unit:	MEDIUM; PLOT	MEDIUM; PLOT
Weed 6 Code, Stage:	CIRAR; DORMANT	CIRAR; MIDSPRING
Stage Scale:	.	6 IN
Density, Unit:	. .	MEDIUM; PLOT

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Location: Wooster, Ohio Investigator: Doug Doohan

Weed 7 Code, Stage:	ERICA; DORMANT	ERICA; MIDSPRING
Stage Scale:	.	3 IN
Density, Unit:	. .	MEDIUM; PLOT
Weed 8 Code, Stage:	LEPVI; DORMANT	LEPVI; MIDSPRING
Stage Scale:	.	6 IN
Density, Unit:	. .	MEDIUM; PLOT
Weed 9 Code, Stage:	PLALA; DORMANT	PLALA; MIDSPRING
Stage Scale:	.	7 IN DIAMETER
Density, Unit:	. .	LOW; PLOT
Weed10 Code, Stage:	POAAN; DORMANT	POAAN; MIDSPRING
Stage Scale:	0.5 IN	.
Density, Unit:	LOW; PLOT	. .
Weed11 Code, Stage:	POLPY .	POLPY; MIDSPRING
Stage Scale:	.	2.5 IN
Density, Unit:	. .	LOW; PLOT
Weed12 Code, Stage:	RUBFR .	RUBFR; MIDSPRING
Stage Scale:	.	6 IN
Density, Unit:	. .	LOW ; PLOT
Weed13 Code, Stage:	RUMAA .	RUMAA; MIDSPRING
Stage Scale:	.	4 IN
Density, Unit:	. .	LOW; PLOT
Weed14 Code, Stage:	RUMOB .	RUMOB; MIDSPRING
Stage Scale:	.	4 IN
Density, Unit:	. .	LOW; PLOT
Weed15 Code, Stage:	SETFA .	SETFA; MIDSPRING
Stage Scale:	.	2 IN
Density, Unit:	. .	MEDIUM; PLOT
Weed16 Code, Stage:	TAROF; DORMANT	TAROF; MIDSPRING
Stage Scale:	4 IN DIAMETER	8 IN DIAMETER
Density, Unit:	LOW; PLOT	LOW; PLOT
Weed17 Code, Stage:	TRFRE; DORMANT	TRFRE ;MIDSPRING
Stage Scale:	3 IN DIAMETER	6 IN DIAMETER
Density, Unit:	MEDIUM; PLOT	MEDIUM; PLOT

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO_2 BACKPACK	CO_2 BACKPACK
Operating Pressure:	40	40
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002VS	8002VS
Nozzle Spacing, Unit:	18 IN	18 IN
Nozzles/Row:	2	2
Band Width, Unit:	36 IN	36 IN
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	2 MPH	2 MPH
Spray Volume, Unit:	25 GPA	25 GPA

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Investigator: Doug Doohan

Weed Code					CAGSE	CARHI	POAAN	TAROF	SETFA	CHEAL
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				TREE	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				5/4/09	5/4/09	5/4/09	5/4/09	5/4/09	5/4/09	5/4/09
Trt-Eval Interval				30DATDOR	30DATDOR	30DATDOR	30DATDOR	30DATDOR	30DATDOR	30DATDOR
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT	0	83	99	99	99	82	99
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT	0	93	99	99	99	83	99
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT	0	66	99	99	99	7	99
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING							
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				0	50	0	0	0	12	0
Standard Deviation				0	25	0	0	0	6	0
CV				0	41	0	0	0	14	0

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OF MATRIX AND WEED CONTROL

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Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				AGGRE	AMBEL	CIRAR		CAGSE	CARHI	POAAN
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	TREE	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				5/4/09	5/4/09	5/4/09	6/2/09	6/2/09	6/2/09	6/2/09
Trt-Eval Interval				30DATDOR	30DATDOR	30DATDOR	60DATDOR	60DATDOR	60DATDOR	60DATDOR
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT	99	99	93	0	56	99	99
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT	99	99	83	0	73	99	99
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT	99	7	99	0	66	99	0
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING							
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				0	12	27	0	53	0	0
Standard Deviation				0	6	13	0	27	0	0
CV				0	11	19	0	55	0	0

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Trial ID: APPSPRTIMGMATW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				TRFRE	TAROF	SETFA	CHEAL	ERICA	PLALA	AGGRE
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/2/09	6/2/09	6/2/09	6/2/09	6/2/09	6/2/09	6/2/09
Trt-Eval Interval				60DATDOR	60DATDOR	60DATDOR	60DATDOR	60DATDOR	60DATDOR	60DATDOR
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT	99	99	88	99	50	60	99
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT	99	99	93	99	99	53	99
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT	63	99	0	25	66	99	99
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING							
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				55	0	10	43	47	47	0
Standard Deviation				27	0	5	22	24	24	0
CV				42	0	11	39	44	45	0

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Trial ID: APPSPRTIMGMATW 2009
Location: Wooster, Ohio
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Investigator: Doug Doohan

Weed Code				AMBEL	POLPY	CIRAR		CAGSE	TRFRE	TAROF
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	TREE	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/2/09	6/2/09	6/2/09	7/2/09	7/2/09	7/2/09	7/2/09
Trt-Eval Interval				60DATDOR	60DATDOR	60DATDOR	90DATDOR	90DATDOR	90DATDOR	90DATDOR
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT	87	99	99	0	0	99	99
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT	99	99	66	0	83	99	86
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT	0	61	99	0	0	33	0
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING							
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				8	54	57	0	28	57	12
Standard Deviation				4	27	29	0	14	29	6
CV				8	41	43	0	68	49	13

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Investigator: Doug Doohan

Weed Code				SETFA	CHEAL	ERICA	PLALA	AGGRE	AMBEL	CIRAR
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/2/09	7/2/09	7/2/09	7/2/09	7/2/09	7/2/09	7/2/09
Trt-Eval Interval				90DATDOR	90DATDOR	90DATDOR	90DATDOR	90DATDOR	90DATDOR	90DATDOR
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT	0	99	33	0	99	99	99
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT	0	99	99	76	99	99	66
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT	0	0	0	0	0	0	0
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING							
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				0	0	57	40	0	0	57
Standard Deviation				0	0	29	20	0	0	29
CV				0	0	87	105	0	0	69

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Investigator: Doug Doohan

Weed Code					AGRASS	CAGSE	POAAN	TRFRE	TAROF	SETFA
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				TREE	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/11/09	6/11/09	6/11/09	6/11/09	6/11/09	6/11/09	6/11/09
Trt-Eval Interval				30DATMSP	30DATMSP	30DATMSP	30DATMSP	30DATMSP	30DATMSP	30DATMSP
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	36	37	38	39	40	41	42
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT							
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING	0	99	74	99	99	99	99
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING	0	99	83	99	99	99	99
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING	0	0	99	99	99	50	99
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				0	0	43	0	0	50	0
Standard Deviation				0	0	21	0	0	25	0
CV				0	0	33	0	0	40	0

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Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				CHEAL	ERICA	PLALA	AGGRE	AMBEL	POLPY	CIRAR
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/11/09	6/11/09	6/11/09	6/11/09	6/11/09	6/11/09	6/11/09
Trt-Eval Interval				30DATMSP	30DATMSP	30DATMSP	30DATMSP	30DATMSP	30DATMSP	30DATMSP
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	43	44	45	46	47	48	49
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT							
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING	99	99	96	99	99	93	99
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING	99	99	93	96	99	99	94
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING	17	83	99	86	50	99	60
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				29	28	7	21	50	5	55
Standard Deviation				14	14	3	11	25	3	27
CV				27	20	5	15	40	4	43

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Trial ID: APPSPRTIMGMATW 2009
Location: Wooster, Ohio
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Investigator: Doug Doohan

Weed Code					CAGSE	POAAN	TRFRE	TAROF	SETFA	CHEAL
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				TREE	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/12/09	7/12/09	7/12/09	7/12/09	7/12/09	7/12/09	7/12/09
Trt-Eval Interval				60DATMSP	60DATMSP	60DATMSP	60DATMSP	60DATMSP	60DATMSP	60DATMSP
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	50	51	52	53	54	55	56
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT							
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING	0	83	99	99	99	80	0
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING	0	78	99	99	99	88	0
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING	0	66	0	33	0	20	0
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				0	73	0	57	0	41	0
Standard Deviation				0	37	0	29	0	21	0
CV				0	65	0	49	0	44	0

The Ohio State University

APPLES - SPRING APPLICATION TIMINGS OF MATRIX AND WEED CONTROL

Trial ID: APPSPRTIMGMATW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				ERICA	PLALA	AGGRE	AMBEL	CIRAR		CAGSE
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	TREE	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/12/09	7/12/09	7/12/09	7/12/09	7/12/09	8/12/09	8/12/09
Trt-Eval Interval				60DATMSP	60DATMSP	60DATMSP	60DATMSP	60DATMSP	90DATMSP	90DATMSP
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	57	58	59	60	61	62	63
UNTREATED CONTROL				0	0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	DORMANT							
KARMEX	3	LB/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
ROUNDUP+	0.73	QT/A	DORMANT							
NIS	0.25	QT/A	DORMANT							
MATRIX +	4	OZ/A	MIDSPRING	99	76	99	99	99	0	66
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
MATRIX +	4	OZ/A	MIDSPRING	99	85	99	99	86	0	74
KARMEX	3	LB/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING							
NIS	0.25	QT/A	MIDSPRING							
ROUNDUP+	0.73	QT/A	MIDSPRING	48	63	0	99	0	0	99
NIS	0.25	QT/A	MIDSPRING							
LSD (P=.05)				42	58	0	0	23	0	59
Standard Deviation				21	29	0	0	11	0	29
CV				34	52	0	0	24	0	49

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APPLES - SPRING APPLICATION TIMINGS
OF MATRIX AND WEED CONTROL

Trial ID: APPSPRTIMGMATW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				POAAN	TRFRE	TAROF	SETFA	CHEAL	ERICA
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%
Rating Date				8/12/09	8/12/09	8/12/09	8/12/09	8/12/09	8/12/09
Trt-Eval Interval				90DATMSP	90DATMSP	90DATMSP	90DATMSP	90DATMSP	90DATMSP
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	64	65	66	67	68	69
UNTREATED CONTROL				0	0	0	0	0	0
MATRIX +	4	OZ/A	DORMANT						
ROUNDUP+	0.73	QT/A	DORMANT						
NIS	0.25	QT/A	DORMANT						
MATRIX +	4	OZ/A	DORMANT						
KARMEX	3	LB/A	DORMANT						
ROUNDUP+	0.73	QT/A	DORMANT						
NIS	0.25	QT/A	DORMANT						
ROUNDUP+	0.73	QT/A	DORMANT						
NIS	0.25	QT/A	DORMANT						
MATRIX +	4	OZ/A	MIDSPRING	53	99	99	66	51	70
ROUNDUP+	0.73	QT/A	MIDSPRING						
NIS	0.25	QT/A	MIDSPRING						
MATRIX +	4	OZ/A	MIDSPRING	48	99	99	60	73	99
KARMEX	3	LB/A	MIDSPRING						
ROUNDUP+	0.73	QT/A	MIDSPRING						
NIS	0.25	QT/A	MIDSPRING						
ROUNDUP+	0.73	QT/A	MIDSPRING	99	23	99	0	5	99
NIS	0.25	QT/A	MIDSPRING						
LSD (P=.05)				50	40	0	71	52	26
Standard Deviation				25	20	0	36	26	13
CV				50	37	0	113	81	19

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APPLES - SPRING APPLICATION TIMINGS OF MATRIX AND WEED CONTROL

Trial ID: APPSPRTIMGMATW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				PLALA	AGGRE	AMBEL	CIRAR
Crop Code				MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%
Rating Date				8/12/09	8/12/09	8/12/09	8/12/09
Trt-Eval Interval				90DATMSP	90DATMSP	90DATMSP	90DATMSP
Treatment Name	Prod Rate	Product Rate Unit	Grow Stg	70	71	72	73
UNTREATED CONTROL				0	0	0	0
MATRIX +	4	OZ/A	DORMANT				
ROUNDUP+	0.73	QT/A	DORMANT				
NIS	0.25	QT/A	DORMANT				
MATRIX +	4	OZ/A	DORMANT				
KARMEX	3	LB/A	DORMANT				
ROUNDUP+	0.73	QT/A	DORMANT				
NIS	0.25	QT/A	DORMANT				
ROUNDUP+	0.73	QT/A	DORMANT				
NIS	0.25	QT/A	DORMANT				
MATRIX +	4	OZ/A	MIDSPRING	50	46	83	99
ROUNDUP+	0.73	QT/A	MIDSPRING				
NIS	0.25	QT/A	MIDSPRING				
MATRIX +	4	OZ/A	MIDSPRING	0	73	62	83
KARMEX	3	LB/A	MIDSPRING				
ROUNDUP+	0.73	QT/A	MIDSPRING				
NIS	0.25	QT/A	MIDSPRING				
ROUNDUP+	0.73	QT/A	MIDSPRING	60	79	60	99
NIS	0.25	QT/A	MIDSPRING				
LSD (P=.05)				62	78	59	28
Standard Deviation				31	39	29	14
CV				114	78	57	20

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: Wooster, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Dr. Doug Doohan

Objective: To evaluate postemergence herbicides for use in established apples for crop injury and weed control.

TRIAL SUMMARY: None of treatments caused any visual injury to the apple trees. Of the treatments tested, Sinbar alone at 2 lbs/A provided the best overall weed control, followed by Sinbar + Roundup (except for foxtail).

TRIAL LOCATION

City: Wooster
State/Prov.: OH
Postal Code: 44691
Country: USA

Trial Status: Final
Trial Reliability: Reliable
Initiation Date: 05/12/09
Planned Completion Date: 07/15/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	AMBEL	common ragweed	*Ambrosia artemisiifolia L.*
2	CAGSE	hedge bindweed	*Calystegia sepium (L.) R.Br.*
3	CARHI	hairy bittercress	*Cardamine hirsuta L.*
4	CHEAL	lambsquarter	*Chenopodium album L.*
5	CIRAR	Canada thistle	*Cirsium arvense L.*
6	DAUCA	wild carrot	*Daucus carota L.*
7	HPPVU	marestail	*Hippuris vulgaris L.*
8	LEPLA	pepperweed	*Lepidium campestre L.*
9	PLALA	buckhorn plantain	*Plantago lanceolata L.*
10	POLPY	Smartweed	*Polygonum penslyvanicum L.*
11	RUMAA	red sorrel	*Rumex acetosella L.*
12	SETLU	giant foxtail	*Setaria lutescens*
13	TAROF	dandelion	*Taraxacum officinale*
14	TRFPR	red clover	*Trifolium pratense L.*

Crop 1: MABSD APPLE
Planting Date: 05/15/06
Perennial Age: 3 YR
Row Spacing: 10 FT

Variety: IMPROVED GOLDEN DELICIOUS
Planting Method: CONVENTIONAL
Seed Bed: CONVENTIONAL
Spacing Within Row: 15 FT

Crop 2: MABSD APPLE
Planting Date: 05/15/06
Perennial Age: 3 YR
Row Spacing: 10 FT

Variety: FUJI
Planting Method: CONVENTIONAL
Seed Bed: CONVENTIONAL
Spacing Within Row: 15 FT

The Ohio State University

APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: Wooster, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Dr. Doug Doohan

SITE AND DESIGN

Plot Width, Unit: 6 FT
Site Type: HILLSIDE
Tillage Type: NONE

Plot Length, Unit: 15 FT
Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 16	% OM: 3.11	Texture: SILT LOAM
% Silt: 72	pH: 5.8	Soil Name: WOOSTER SILT LOAM
% Clay: 12	CEC: 14	Fert. Level: MODERATE

APPLICATION DESCRIPTION

	A
Application Date:	5/12/2009
Time of Day:	2-3 PM
Application Method:	SPRAY
Application Timing:	POST
Applic. Placement:	DIRECTED
Air Temp., Unit:	61.2 F
% Relative Humidity:	42.4
Wind Velocity, Unit:	3.1 MPH
Soil Moisture:	MOIST
% Cloud Cover:	70

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	MABSD, POST
Stage Scale:	VEGETATIVE
Height, Unit:	6 FT
Crop 2 Code, Stage:	MABSD, POST
Stage Scale:	VEGETATIVE
Height, Unit:	6 FT
Crop 3 Code, Stage:	MABSD, POST
Stage Scale:	VEGETATIVE
Height, Unit:	6 FT

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Dr. Doug Doohan

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	PLALA , POST
Stage Scale:	7 IN DIAMETER
Density, Unit:	MEDIUM, PLOT
Weed 2 Code, Stage:	AMBEL, POST
Stage Scale:	1.5 IN
Density, Unit:	MEDIUM, PLOT
Weed 3 Code, Stage:	LEPLA, POST
Stage Scale:	7 IN
Density, Unit:	LOW, PLOT
Weed 4 Code, Stage:	CHEAL, POST
Stage Scale:	3 IN
Density, Unit:	MEDIUM, PLOT
Weed 5 Code, Stage:	CIRAR POST
Stage Scale:	3-8 IN
Density, Unit:	MEDIUM, PLOT
Weed 6 Code, Stage:	POLPY, POST
Stage Scale:	2.5 IN
Density, Unit:	LOW PLOT
Weed 7 Code, Stage:	CARHI, POST
Stage Scale:	6 IN
Density, Unit:	HIGH PLOT
Weed 8 Code, Stage:	RUMAA, POST
Stage Scale:	4 IN
Density, Unit:	MEDIUM, PLOT
Weed 9 Code, Stage:	SETLU, POST
Stage Scale:	2 IN
Density, Unit:	MEDIUM, PLOT
Weed 10 Code, Stage:	TAROF POST
Stage Scale:	8 IN DIAM
Density, Unit:	MEDIUM, PLOT
Weed 11 Code, Stage:	HPPVU, POST
Stage Scale:	4 IN
Density, Unit:	LOW, PLOT
Weed 12 Code, Stage:	CAGSE, POST
Stage Scale:	.
Density, Unit:	. .
Weed 13 Code, Stage:	DAUCA, POST
Stage Scale:	.
Density, Unit:	. .
Weed 14 Code, Stage:	TRFPR, POST
Stage Scale:	2 IN
Density, Unit:	HIGH, PLOT

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: Wooster, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Dr. Doug Doohan

APPLICATION EQUIPMENT

	A
Appl. Equipment:	BACKPACK
Operating Pressure:	35
Nozzle Type:	FLAT FAN
Nozzle Size:	8002VS
Nozzle Spacing, Unit:	18 IN
Nozzles/Row:	2
Band Width, Unit:	36 IN
Boom Height, Unit:	18 IN
Ground Speed, Unit:	3 MPH
Spray Volume, Unit:	25 GPA
Propellant:	CO2

Trial Comments: This trial combined treatments from 3 separate chemical companies; Rely (2 treatments), Sinbar (2 treatments), and BAS80004H (1 treatment). There were 2 apple varieties in the trial; Improved Golden Delicious (Control 1); and Fuji (Control2). Rely treatments used Control 1, Sinbar and BAS0400H treatments used Control 2. This insured fairness and consistency in rating.

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code					CAGSE	CARHI	TAROF	SETLU	CHEAL	HPPVU
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				CROP	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				INJURY	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				5/19/09	5/19/09	5/19/09	5/19/09	5/19/09	5/19/09	5/19/09
Trt-Eval Interval				7DAT	7DAT	7DAT	7DAT	7DAT	7DAT	7DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST	0	95	89	91	91	92	91
RELY 200 +	115	FL OZ/A	POST	0	95	93	93	93	93	93
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	0	95	65	81	78	56	65
SINBAR +	2	LB/A	POST	0	23	76	81	81	81	80
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	0	95	95	95	95	95	95
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				0	25	18	6	7	16	17
Standard Deviation				0	17	12	4	4	11	11
CV				0	31	23	7	8	21	22

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				LEPLA	PLALA	AMBEL	CIRAR	RUMAA		CAGSE
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	CROP	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				5/19/09	5/19/09	5/19/09	5/19/09	5/19/09	5/26/09	5/26/09
Trt-Eval Interval				7DAT	7DAT	7DAT	7DAT	7DAT	14DAT	14DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST	89	91	91	86	75	0	99
RELY 200 +	115	FL OZ/A	POST	93	93	93	88	86	0	99
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	60	76	83	25	25	0	99
SINBAR +	2	LB/A	POST	30	68	81	46	100	0	83
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	95	88	95	81	100	0	99
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				26	14	5	15	27	0	2
Standard Deviation				17	10	3	10	18	0	1
CV				38	19	6	25	38	0	2

The Ohio State University

APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				CARHI	TAROF	SETLU	CHEAL	HPPVU	LEPLA	PLALA
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				5/26/09	5/26/09	5/26/09	5/26/09	5/26/09	5/26/09	5/26/09
Trt-Eval Interval				14DAT	14DAT	14DAT	14DAT	14DAT	14DAT	14DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST	89	75	85	91	46	48	96
RELY 200 +	115	FL OZ/A	POST	93	100	100	100	50	100	99
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	65	25	88	75	25	75	48
SINBAR +	2	LB/A	POST	76	98	99	99	100	100	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	95	100	95	100	100	100	98
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				18	39	5	26	49	26	29
Standard Deviation				12	27	3	18	33	18	20
CV				23	54	6	31	82	34	36

The Ohio State University

APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				AMBEL	RUMAA	CIRAR	TRFRE		CAGSE	CARHI
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	CROP	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				5/26/09	5/26/09	5/26/09	5/26/09	6/11/09	6/11/09	6/11/09
Trt-Eval Interval				14DAT	14DAT	14DAT	14DAT	28DAT	28DAT	28DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST	100	88	71	100	0	99	89
RELY 200 +	115	FL OZ/A	POST	99	74	94	99	0	100	93
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	75	25	40	75	0	99	65
SINBAR +	2	LB/A	POST	100	100	90	100	0	79	76
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	98	100	93	98	0	99	95
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				26	36	24	26	0	21	18
Standard Deviation				18	25	16	18	0	14	12
CV				30	51	33	30	0	23	23

The Ohio State University

APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				DAUCA	TAROF	SETLU	CHEAL	HPPVU	LEPLA	PLALA
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/11/09	6/11/09	6/11/09	6/11/09	6/11/09	6/11/09	6/11/09
Trt-Eval Interval				28DAT	28DAT	28DAT	28DAT	28DAT	28DAT	28DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST	74	99	99	62	92	67	91
RELY 200 +	115	FL OZ/A	POST	100	100	100	100	100	99	90
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	99	99	99	99	99	96
SINBAR +	2	LB/A	POST	99	99	99	99	99	99	97
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	25	99	99	99	99	99	90
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				36	0	0	13	8	12	8
Standard Deviation				24	0	0	9	5	8	5
CV				49	0	0	15	8	14	9

The Ohio State University

APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				AMBEL	RUMAA	CIRAR	TRFRE		CAGSE	CARHI
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	CROP	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/11/09	6/11/09	6/11/09	6/11/09	7/12/09	7/12/09	7/12/09
Trt-Eval Interval				28DAT	28DAT	28DAT	28DAT	60DAT	60DAT	60DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	38	39	40	41	42
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST	95	99	91	99			
RELY 200 +	115	FL OZ/A	POST	99	100	95	100	0	99	99
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	99	75	99	0	99	99
SINBAR +	2	LB/A	POST	99	99	94	99	0	96	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	99	99	98	99	0	99	74
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				4	0	10	0	0	30	33
Standard Deviation				2	0	7	0	0	21	23
CV				4	0	12	0	0	34	38

The Ohio State University

APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				TAROF	SETLU	CHEAL	HPPVU	LEPLA	PLALA	AMBEL
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/12/09	7/12/09	7/12/09	7/12/09	7/12/09	7/12/09	7/12/09
Trt-Eval Interval				60DAT	60DAT	60DAT	60DAT	60DAT	60DAT	60DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	43	44	45	46	47	48	49
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST							
RELY 200 +	115	FL OZ/A	POST	99	58	18	99	99	31	73
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	87	99	99	99	99	99
SINBAR +	2	LB/A	POST	99	75	96	99	99	99	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	50	25	99	99	99	36	74
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				28	28	34	28	23	28	46
Standard Deviation				19	19	23	19	16	19	32
CV				31	42	58	33	26	37	58

The Ohio State University

APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				RUMAA	CIRAR	DAUCA	TRFRE		CAGSE	CARHI
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	CROP	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/12/09	7/12/09	7/12/09	7/12/09	8/12/09	8/12/09	8/12/09
Trt-Eval Interval				60DAT	60DAT	60DAT	60DAT	90DAT	90DAT	90DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	50	51	52	53	54	55	56
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST							
RELY 200 +	115	FL OZ/A	POST	99	25	25	92	0	99	99
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	50	74	99	0	99	99
SINBAR +	2	LB/A	POST	99	86	74	99	0	96	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	99	73	0	85	0	74	74
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				0	33	49	6	0	38	33
Standard Deviation				0	22	34	4	0	26	23
CV				0	50	111	7	0	44	38

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				TAROF	SETLU	CHEAL	HPPVU	LEPLA	PLALA	AMBEL
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				8/12/09	8/12/09	8/12/09	8/12/09	8/12/09	8/12/09	8/12/09
Trt-Eval Interval				90DAT	90DAT	90DAT	90DAT	90DAT	90DAT	90DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	57	58	59	60	61	62	63
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST							
RELY 200 +	115	FL OZ/A	POST	99	71	18	99	99	31	73
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	35	77	99	99	99	99
SINBAR +	2	LB/A	POST	99	28	32	99	99	99	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	74	0	57	65	74	74	42
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				34	31	37	38	35	29	47
Standard Deviation				24	21	26	26	24	20	32
CV				39	99	111	48	39	35	67

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				RUMAA	CIRAR	DAUCA	TRFRE		CAGSE	CARHI
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	CROP	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				8/12/09	8/12/09	8/12/09	8/12/09	9/12/09	9/12/09	9/12/09
Trt-Eval Interval				90DAT	90DAT	90DAT	90DAT	120DAT	120DAT	120DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	64	65	66	67	68	69	70
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST							
RELY 200 +	115	FL OZ/A	POST	99	25	25	99	0	99	99
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	35	74	94	0	99	99
SINBAR +	2	LB/A	POST	99	46	74	99	0	75	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	66	60	0	25	0	50	74
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				23	48	49	36	0	32	33
Standard Deviation				16	33	34	25	0	22	23
CV				25	105	111	48	0	44	38

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				TAROF	SETLU	CHEAL	HPPVU	LEPLA	PLALA	AMBEL
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				9/12/09	9/12/09	9/12/09	9/12/09	9/12/09	9/12/09	9/12/09
Trt-Eval Interval				120DAT	120DAT	120DAT	120DAT	120DAT	120DAT	120DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	71	72	73	74	75	76	77
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST							
RELY 200 +	115	FL OZ/A	POST	99	59	18	99	99	31	73
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	25	99	99	99	99	99
SINBAR +	2	LB/A	POST	99	0	74	99	99	91	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	74	20	99	0	99	87	0
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				24	44	38	24	3	19	46
Standard Deviation				17	31	26	17	2	13	31
CV				26	154	74	46	3	23	76

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				RUMAA	CIRAR	DAUCA	TRFRE		CAGSE	CARHI
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	CROP	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	INJURY	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				9/12/09	9/12/09	9/12/09	9/12/09	10/12/09	10/12/09	10/12/09
Trt-Eval Interval				120DAT	120DAT	120DAT	120DAT	150DAT	150DAT	150DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	78	79	80	81	82	83	84
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST							
RELY 200 +	115	FL OZ/A	POST	99	25	25	99	0	99	99
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	70	99	99	0	99	99
SINBAR +	2	LB/A	POST	99	40	99	99	0	99	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	99	81	25	99	0	67	74
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				0	32	45	0	0	25	26
Standard Deviation				0	22	31	0	0	17	18
CV				0	50	92	0	0	28	28

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				TAROF	SETLU	CHEAL	HPPVU	LEPLA	PLALA	AMBEL
Crop Code				MABSD	MABSD	MABSD	MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				10/12/09	10/12/09	10/12/09	10/12/09	10/12/09	10/12/09	10/12/09
Trt-Eval Interval				150DAT	150DAT	150DAT	150DAT	150DAT	150DAT	150DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	85	86	87	88	89	90	91
CONTROL 1				0	0	0	0	0	0	0
RELY 200	115	FL OZ/A	POST							
RELY 200 +	115	FL OZ/A	POST	99	59	18	99	99	31	73
MATRIX	4	OZ/A	POST							
CONTROL 2				0	0	0	0	0	0	0
SINBAR	2	LB/A	POST	99	47	99	99	99	99	74
SINBAR +	2	LB/A	POST	99	0	74	99	99	91	99
ROUNDUP W/M	1	QT/A	POST							
BAS 800 04H+	2	FL OZ/A	POST	74	20	99	0	99	87	74
ROUNDUP W/M+	22	OZ/A	POST							
PROWL H2O+	3	QT/A	POST							
MSO+	1	QT/A	POST							
AMS	696	OZ/A	POST							
LSD (P=.05)				24	52	38	24	3	19	62
Standard Deviation				17	35	26	17	2	13	43
CV				26	144	74	46	3	23	78

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APPLES - WEED CONTROL AND CROP TOLERANCE USING POST HERBICIDES

Trial ID: APPWCCTPOSTW 2009
Location: W ooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				RUMAA	CIRAR	DAUCA	TRFRE
Crop Code				MABSD	MABSD	MABSD	MABSD
Part Rated				WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%
Rating Date				10/12/09	10/12/09	10/12/09	10/12/09
Trt-Eval Interval				150DAT	150DAT	150DAT	150DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	92	93	94	95
CONTROL 1				0	0	0	0
RELY 200	115	FL OZ/A	POST				
RELY 200 +	115	FL OZ/A	POST	99	25	25	99
MATRIX	4	OZ/A	POST				
CONTROL 2				0	0	0	0
SINBAR	2	LB/A	POST	99	62	74	99
SINBAR +	2	LB/A	POST	99	62	74	99
ROUNDUP W/M	1	QT/A	POST				
BAS 800 04H+	2	FL OZ/A	POST	99	96	0	99
ROUNDUP W/M+	22	OZ/A	POST				
PROWL H2O+	3	QT/A	POST				
MSO+	1	QT/A	POST				
AMS	696	OZ/A	POST				
LSD (P=.05)				0	35	49	0
Standard Deviation				0	24	34	0
CV				0	59	111	0

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009 Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Objective: To evaluate PRE herbicide treatments on newly - planted dormant bramble plants.

TRIAL SUMMARY: At 6 weeks after treatment, Sinbar provided the best overall weed control with low crop injury (13%) (though weak on Canada thistle and sowthistle). Chateau offerred good weed control but caused higher plant injury (17%) especially "Caroline". Goaltender had fair weed control and high plant injury (25%). Prowl and Surflan had poor weed control but low crop injury (11%).

TRIAL LOCATION

City: Wooster Trial Status: Final
State/Prov.: OH Trial Reliability: Reliable
Postal Code: 44691 Initiation Date: 05/01/09
Country: USA Planned Completion Date: 08/30/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	AGGRE	quackgrass	*Elytrigia repens (L.) Nevski*
2	AGRASS	foxtail, crabgrass spp.	*Setaria, Digitaria spp.*
3	AMAXX	pigweed	*Amaranthus spp.*
4	AMBEL	common ragweed	*Ambrosia artemisiifolia L.*
5	CAPBP	shepherds-purse	*Capsella bursa-pastoris (L.) Medicus*
6	CERVU	mouseear chickweed	*Cerastium vulgatum L.*
7	CHEAL	common lambsquarter	*Chenopodim album L.*
8	CIRAR	Canada thistle	*Cirsium arvense (L.) S cop.*
9	CYPES	yellow nutsedge	*Cyperus esculentes L.*
10	GLEHE	ground ivy	*Glechoma hederacea L.*
11	OXAST	yellow woodsorrel	*Oxalis stricta L.*
12	PLALA	buckhorn plantain	*Plantago lanceolata L.*
13	POLPY	Pennsylvania smartweed	*Polygonum pensylvanicum L.*
14	POROL	common purslane	*Portulaca oleracea L.*
15	SENVU	groundsel	*Senecio vulgaris L.*
16	TAROF	dandelion	*Taraxacum officinale Weber in Wiggers*
17	TRFRE	white clover	*Trifolium repens L.*

Crop 1: RUBFR BRAMBLE Varieties: Nova, Caroline, Chester
Plant Date: 04/28/09 Planting Method: HAND-PLANTED
Rate: 1 PER 36" Depth: 6 IN Perennial Age: 1 YR
Row Spacing: 10 FT Spacing Within Row: 3 FT Seed Bed: CONVENTIONAL
Soil Temperature: 58 F Soil Moisture: MOIST

SITE AND DESIGN

Plot Width, Unit: 6 FT Plot Length, Unit: 25 FT
Site Type: LEVEL FIELD Reps: 4
Tillage Type: NONE Study Design: SPLIT-PLOT

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009 Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

SOIL DESCRIPTION

% Sand: 11	% OM: 3.0	Texture: SILT LOAM
% Silt: 75	pH: 6.0	Soil Name: WOOSTER SILT LOAM
% Clay: 14	CEC: 12	Fert. Level: MODERATE

APPLICATION DESCRIPTION

	A
Application Date:	5/1/2009
Time of Day:	2-4 PM
Application Method:	SPRAY
Application Timing:	PRE
Applic. Placement:	BROADCAST
Air Temp., Unit:	71.8 F
% Relative Humidity:	73.2
Wind Velocity, Unit:	9.5 MPH
Dew Presence (Y/N):	N
Soil Moisture:	MOIST
% Cloud Cover:	80

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	RUBFR, PRE
Stage Scale:	DORMANT
Height, Unit:	6 IN

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	AGGRE, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 2 Code, Stage:	AGRASS, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 3 Code, Stage:	AMAXX, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 4 Code, Stage:	AMBEL, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 5 Code, Stage:	CAPBP, PRE
Stage Scale:	.
Density, Unit:	. .

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009 Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Weed 6 Code, Stage:	CERVU, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 7 Code, Stage:	CHEAL, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 8 Code, Stage:	CIRAR, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 9 Code, Stage:	CYPES, PRE
Stage Scale:	.
Density, Unit:	. .
Weed10 Code, Stage:	GLEHE, PRE
Stage Scale:	.
Density, Unit:	. .
Weed11 Code, Stage:	OXAST, PRE
Stage Scale:	.
Density, Unit:	. .
Weed12 Code, Stage:	PLALA, PRE
Stage Scale:	.
Density, Unit:	. .
Weed13 Code, Stage:	POLPY, PRE
Stage Scale:	.
Density, Unit:	. .
Weed14 Code, Stage:	POROL, PRE
Stage Scale:	.
Density, Unit:	. .
Weed15 Code, Stage:	SENVU, PRE
Stage Scale:	.
Density, Unit:	. .
Weed16 Code, Stage:	TAROF, PRE
Stage Scale:	.
Density, Unit:	. .
Weed17 Code, Stage:	TRFRE, PRE
Stage Scale:	.
Density, Unit:	. .

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio

Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

APPLICATION EQUIPMENT

	A
Appl. Equipment:	CO2 BACKPACK
Operating Pressure:	40
Nozzle Type:	FLAT FAN
Nozzle Size:	8002VS
Nozzle Spacing, Unit:	15 IN
Nozzles/Row:	4
Band Width, Unit:	60 IN
Boom Height, Unit:	18 IN
Ground Speed, Unit:	2.6 MPH
Spray Volume, Unit:	25 GPA
Propellant:	CO2

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code								AGRASS	CIRAR	
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				PLANT	WEED	PLANT	PLANT	WEED	WEED	PLANT
Rating Data Type				STUNT	CONTROL	STUNT	NECROSIS	CONTROL	CONTROL	NO ALIVE
Rating Unit				%	%	%	%	%	%	PER PLOT
Rating Date				5/15/09	5/15/09	6/1/09	6/1/09	6/1/09	6/1/09	6/12/09
Trt-Eval Interval				2 WAT	2 WAT	4 WAT	4 WAT	4 WAT	4 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
Untreated Control CHESTER				0	0	0	0	0	0	4
Untreated Control CAROLINE				0	0	0	0	0	0	4
Untreated Control NOVA				0	0	0	0	0	0	4
CHATEAU CHESTER	6	OZ/A	PRE	63	97	44	5	95	76	4
CHATEAU CAROLINE	6	OZ/A	PRE	9	99	71	13	96	95	4
CHATEAU NOVA	6	OZ/A	PRE	11	99	23	8	94	91	4
GOALTENDER CHESTER	1	PT/A	PRE	38	97	36	11	84	85	4
GOALTENDER CAROLINE	1	PT/A	PRE	6	97	59	19	90	71	4
GOALTENDER NOVA	1	PT/A	PRE	15	99	36	11	84	70	4
PROWL CHESTER	3	PT/A	PRE	18	81	9	1	90	31	4
PROWL CAROLINE	3	PT/A	PRE	8	89	20	0	86	15	4
PROWL NOVA	3	PT/A	PRE	10	88	30	0	93	16	3

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code								AGRASS	CIRAR	
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				PLANT	WEED	PLANT	PLANT	WEED	WEED	PLANT
Rating Data Type				STUNT	CONTROL	STUNT	NECROSIS	CONTROL	CONTROL	NO ALIVE
Rating Unit				%	%	%	%	%	%	PER PLOT
Rating Date				5/15/09	5/15/09	6/1/09	6/1/09	6/1/09	6/1/09	6/12/09
Trt-Eval Interval				2 WAT	2 WAT	4 WAT	4 WAT	4 WAT	4 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
SINBAR CHESTER	1.5	LB/A	PRE	23	84	36	0	95	15	4
SINBAR CAROLINE	1.5	LB/A	PRE	5	83	25	0	96	28	4
SINBAR NOVA	1.5	LB/A	PRE	8	85	16	0	93	23	4
SURFLAN CHESTER	6	QT/A	PRE	18	91	16	0	90	34	4
SURFLAN CAROLINE	6	QT/A	PRE	4	91	16	5	86	31	4
SURFLAN NOVA	6	QT/A	PRE	9	88	20	0	85	34	4
LSD (P=.05)				15	8	25	9	9	21	1
Standard Deviation				11	5	18	6	7	15	0
CV				78	7	71	152	9	37	12

The Ohio State University

BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code							AGRASS	CIRAR	AMBEL	AMAXX
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	WEED	WEED
Rating Data Type				NECROSIS	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/12/09	6/12/09	6/12/09	6/12/09	6/12/09	6/12/09	6/12/09
Trt-Eval Interval				6 WAT	6 WAT	6 WAT	6 WAT	6 WAT	6 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
Untreated Control CHESTER				0	0	0	0	0	0	0
Untreated Control CAROLINE				0	0	0	0	0	0	0
Untreated Control NOVA				0	0	0	0	0	0	0
CHATEAU CHESTER	6	OZ/A	PRE	4	5	16	96	13	100	100
CHATEAU CAROLINE	6	OZ/A	PRE	20	9	23	94	58	100	100
CHATEAU NOVA	6	OZ/A	PRE	11	4	13	91	48	100	100
GOALTENDER CHESTER	1	PT/A	PRE	14	9	23	61	44	90	100
GOALTENDER CAROLINE	1	PT/A	PRE	18	8	31	79	35	90	100
GOALTENDER NOVA	1	PT/A	PRE	16	3	20	84	30	95	99
PROWL CHESTER	3	PT/A	PRE	0	6	9	86	51	56	99
PROWL CAROLINE	3	PT/A	PRE	4	10	15	91	48	20	78
PROWL NOVA	3	PT/A	PRE	1	5	10	93	23	5	96

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code							AGRASS	CIRAR	AMBEL	AMAXX
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	WEED	WEED
Rating Data Type				NECROSIS	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/12/09	6/12/09	6/12/09	6/12/09	6/12/09	6/12/09	6/12/09
Trt-Eval Interval				6 WAT	6 WAT	6 WAT	6 WAT	6 WAT	6 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
SINBAR CHESTER	1.5	LB/A	PRE	0	4	16	100	25	100	100
SINBAR CAROLINE	1.5	LB/A	PRE	5	8	14	100	44	100	100
SINBAR NOVA	1.5	LB/A	PRE	4	6	8	100	66	100	100
SURFLAN CHESTER	6	QT/A	PRE	1	6	10	85	94	39	98
SURFLAN CAROLINE	6	QT/A	PRE	5	9	9	81	34	45	100
SURFLAN NOVA	6	QT/A	PRE	0	4	13	89	38	70	78
LSD (P=.05)				4	6	10	15	56	31	20
Standard Deviation				3	4	7	10	40	22	14
CV				55	77	55	14	110	35	18

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				CHEAL					AGRASS	CIRAR
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	PLANT	PLANT	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	NO ALIVE	NECROSIS	CHLOROSIS	STUNT	CONTROL	CONTROL
Rating Unit				%	PER PLOT	%	%	%	%	%
Rating Date				6/12/09	6/26/09	6/26/09	6/26/09	6/26/09	6/26/09	6/26/09
Trt-Eval Interval				6 WAT	8 WAT	8 WAT	8 WAT	8 WAT	8 WAT	8 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
Untreated Control CHESTER				0	4	0	0	0	0	0
Untreated Control CAROLINE				0	4	0	0	0	0	0
Untreated Control NOVA				0	4	0	0	0	0	0
CHATEAU CHESTER	6	OZ/A	PRE	100	4	3	0	9	80	0
CHATEAU CAROLINE	6	OZ/A	PRE	100	4	9	0	18	79	55
CHATEAU NOVA	6	OZ/A	PRE	100	4	4	0	8	74	25
GOALTENDER CHESTER	1	PT/A	PRE	100	4	3	3	13	60	31
GOALTENDER CAROLINE	1	PT/A	PRE	100	4	15	0	36	46	10
GOALTENDER NOVA	1	PT/A	PRE	100	4	6	0	19	45	23
PROWL CHESTER	3	PT/A	PRE	99	4	0	0	8	78	28
PROWL CAROLINE	3	PT/A	PRE	100	4	0	0	4	83	33
PROWL NOVA	3	PT/A	PRE	99	3	1	0	6	66	25

The Ohio State University

BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				CHEAL					AGRASS	CIRAR
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	PLANT	PLANT	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	NO ALIVE	NECROSIS	CHLOROSIS	STUNT	CONTROL	CONTROL
Rating Unit				%	PER PLOT	%	%	%	%	%
Rating Date				6/12/09	6/26/09	6/26/09	6/26/09	6/26/09	6/26/09	6/26/09
Trt-Eval Interval				6 WAT	8 WAT	8 WAT	8 WAT	8 WAT	8 WAT	8 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
SINBAR CHESTER	1.5	LB/A	PRE	100	4	0	0	9	96	43
SINBAR CAROLINE	1.5	LB/A	PRE	100	4	1	0	8	96	20
SINBAR NOVA	1.5	LB/A	PRE	100	4	3	0	1	98	40
SURFLAN CHESTER	6	QT/A	PRE	100	4	0	0	3	56	80
SURFLAN CAROLINE	6	QT/A	PRE	100	4	1	0	6	50	23
SURFLAN NOVA	6	QT/A	PRE	98	3	0	0	8	55	23
LSD (P=.05)				2	1	4	1	11	22	51
Standard Deviation				1	1	3	1	8	16	36
CV				2	13	123	490	90	27	142

The Ohio State University

BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				AMBEL	AMAXX	CHEAL			AGRASS	CIRAR
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	NO ALIVE	STUNT	CONTROL	CONTROL
Rating Unit				%	%	%	PER PLOT	%	%	%
Rating Date				6/26/09	6/26/09	6/26/09	7/10/09	7/10/09	7/10/09	7/10/09
Trt-Eval Interval				8 WAT	8 WAT	8 WAT	10 WAT	10 WAT	10 WAT	10 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
Untreated Control CHESTER				0	0	0	4	0	0	0
Untreated Control CAROLINE				0	0	0	4	0	0	0
Untreated Control NOVA				0	0	0	4	0	0	0
CHATEAU CHESTER	6	OZ/A	PRE	100	100	100	4	8	83	5
CHATEAU CAROLINE	6	OZ/A	PRE	100	100	100	4	15	66	56
CHATEAU NOVA	6	OZ/A	PRE	100	100	100	4	11	68	29
GOALTENDER CHESTER	1	PT/A	PRE	54	100	100	4	14	55	26
GOALTENDER CAROLINE	1	PT/A	PRE	58	100	100	4	23	54	13
GOALTENDER NOVA	1	PT/A	PRE	55	100	100	4	15	43	25
PROWL CHESTER	3	PT/A	PRE	3	100	100	4	5	84	30
PROWL CAROLINE	3	PT/A	PRE	0	79	100	4	5	83	33
PROWL NOVA	3	PT/A	PRE	4	75	100	4	9	66	25

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				AMBEL	AMAXX	CHEAL			AGRASS	CIRAR
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	NO ALIVE	STUNT	CONTROL	CONTROL
Rating Unit				%	%	%	PER PLOT	%	%	%
Rating Date				6/26/09	6/26/09	6/26/09	7/10/09	7/10/09	7/10/09	7/10/09
Trt-Eval Interval				8 WAT	8 WAT	8 WAT	10 WAT	10 WAT	10 WAT	10 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
SINBAR CHESTER	1.5	LB/A	PRE	100	100	100	4	8	96	36
SINBAR CAROLINE	1.5	LB/A	PRE	100	100	75	4	5	95	30
SINBAR NOVA	1.5	LB/A	PRE	100	100	100	4	5	98	38
SURFLAN CHESTER	6	QT/A	PRE	5	53	53	4	3	53	80
SURFLAN CAROLINE	6	QT/A	PRE	25	78	100	4	5	53	24
SURFLAN NOVA	6	QT/A	PRE	5	75	75	3	6	50	23
LSD (P=.05)				35	37	29	1	8	30	52
Standard Deviation				24	26	21	0	6	21	37
CV				54	35	27	13	75	37	141

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				AMBEL	AMAXX	CHEAL	AGGRE	CIRAR	OXAST	TAROF
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/10/09	7/10/09	7/10/09	10/16/09	10/16/09	10/16/09	10/16/09
Trt-Eval Interval				10 WAT	10 WAT	10 WAT	24 WAT	24 WAT	24 WAT	24 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35
Untreated Control CHESTER				0	0	0	0	0	0	0
Untreated Control CAROLINE				0	0	0	0	0	0	0
Untreated Control NOVA				0	0	0	0	0	0	0
CHATEAU CHESTER	6	OZ/A	PRE	100	100	100	25	25	25	75
CHATEAU CAROLINE	6	OZ/A	PRE	100	100	100	0	25	25	75
CHATEAU NOVA	6	OZ/A	PRE	100	100	100	0	25	75	75
GOALTENDER CHESTER	1	PT/A	PRE	31	100	100	50	25	25	75
GOALTENDER CAROLINE	1	PT/A	PRE	19	100	100	25	0	25	100
GOALTENDER NOVA	1	PT/A	PRE	53	100	100	25	0	25	100
PROWL CHESTER	3	PT/A	PRE	35	100	100	0	25	50	50
PROWL CAROLINE	3	PT/A	PRE	3	78	100	0	0	0	25
PROWL NOVA	3	PT/A	PRE	5	100	100	0	0	25	25

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				AMBEL	AMAXX	CHEAL	AGGRE	CIRAR	OXAST	TAROF
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/10/09	7/10/09	7/10/09	10/16/09	10/16/09	10/16/09	10/16/09
Trt-Eval Interval				10 WAT	10 WAT	10 WAT	24 WAT	24 WAT	24 WAT	24 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35
SINBAR CHESTER	1.5	LB/A	PRE	100	100	100	0	0	75	50
SINBAR CAROLINE	1.5	LB/A	PRE	100	100	100	0	25	95	25
SINBAR NOVA	1.5	LB/A	PRE	100	100	100	0	0	100	71
SURFLAN CHESTER	6	QT/A	PRE	8	75	100	50	0	0	25
SURFLAN CAROLINE	6	QT/A	PRE	30	100	100	25	0	0	25
SURFLAN NOVA	6	QT/A	PRE	18	100	100	25	0	0	25
LSD (P=.05)				32	23	0	46	42	50	59
Standard Deviation				22	16	0	32	30	36	42
CV				50	20	0	260	354	117	92

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				GLEHE	SENVU	CERVU	PLALA	CHEAL	AMBEL	AMAXX
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				10/16/09	10/16/09	10/16/09	10/16/09	10/16/09	10/16/09	10/16/09
Trt-Eval Interval				24 WAT	24 WAT	24 WAT	24 WAT	24 WAT	24 WAT	24 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	38	39	40	41	42
Untreated Control CHESTER				0	0	0	0	0	0	0
Untreated Control CAROLINE				0	0	0	0	0	0	0
Untreated Control NOVA				0	0	0	0	0	0	0
CHATEAU CHESTER	6	OZ/A	PRE	75	100	100	75	75	100	75
CHATEAU CAROLINE	6	OZ/A	PRE	100	100	100	100	100	100	100
CHATEAU NOVA	6	OZ/A	PRE	50	100	100	100	100	100	100
GOALTENDER CHESTER	1	PT/A	PRE	50	100	50	75	100	100	100
GOALTENDER CAROLINE	1	PT/A	PRE	75	100	25	75	100	100	100
GOALTENDER NOVA	1	PT/A	PRE	50	100	50	100	100	100	100
PROWL CHESTER	3	PT/A	PRE	50	50	100	50	75	50	100
PROWL CAROLINE	3	PT/A	PRE	75	25	100	75	75	75	100
PROWL NOVA	3	PT/A	PRE	75	75	100	75	100	100	100

The Ohio State University

BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				GLEHE	SENVU	CERVU	PLALA	CHEAL	AMBEL	AMAXX
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				10/16/09	10/16/09	10/16/09	10/16/09	10/16/09	10/16/09	10/16/09
Trt-Eval Interval				24 WAT	24 WAT	24 WAT	24 WAT	24 WAT	24 WAT	24 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	38	39	40	41	42
SINBAR CHESTER	1.5	LB/A	PRE	75	100	100	100	75	100	75
SINBAR CAROLINE	1.5	LB/A	PRE	100	100	100	75	100	100	100
SINBAR NOVA	1.5	LB/A	PRE	25	100	50	50	75	100	75
SURFLAN CHESTER	6	QT/A	PRE	75	50	75	100	100	100	100
SURFLAN CAROLINE	6	QT/A	PRE	100	25	100	100	75	75	75
SURFLAN NOVA	6	QT/A	PRE	70	50	75	100	100	100	100
LSD (P=.05)				58	44	41	49	39	29	33
Standard Deviation				41	31	29	34	28	21	23
CV				71	48	43	49	37	27	30

The Ohio State University

BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				CYPES	CAPBP	POLPY	POROL	TRFRE
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%
Rating Date				10/16/09	10/16/09	10/16/09	10/16/09	10/16/09
Trt-Eval Interval				24 WAT	24 WAT	24 WAT	24 WAT	24 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	43	44	45	46	47
Untreated Control CHESTER				0	0	0	0	0
Untreated Control CAROLINE				0	0	0	0	0
Untreated Control NOVA				0	0	0	0	0
CHATEAU CHESTER	6	OZ/A	PRE	75	100	100	100	100
CHATEAU CAROLINE	6	OZ/A	PRE	100	100	100	100	100
CHATEAU NOVA	6	OZ/A	PRE	100	100	100	100	100
GOALTENDER CHESTER	1	PT/A	PRE	75	100	100	100	100
GOALTENDER CAROLINE	1	PT/A	PRE	100	100	75	100	100
GOALTENDER NOVA	1	PT/A	PRE	100	100	100	100	100
PROWL CHESTER	3	PT/A	PRE	100	75	100	100	100
PROWL CAROLINE	3	PT/A	PRE	100	100	100	100	75
PROWL NOVA	3	PT/A	PRE	100	100	100	100	100

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BRAMBLES - WEED CONTROL AND CROP TOLERANCE IN NEWLY PLANTED BRAMBLES

Trial ID: BRAMWCCTNEWW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan, Connie Echaiz, Tim Koch
Investigator: Doug Doohan

Weed Code				CYPES	CAPBP	POLPY	POROL	TRFRE
Crop Code				RUBSG	RUBSG	RUBSG	RUBSG	RUBSG
Part Rated				WEED	WEED	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%
Rating Date				10/16/09	10/16/09	10/16/09	10/16/09	10/16/09
Trt-Eval Interval				24 WAT	24 WAT	24 WAT	24 WAT	24 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	43	44	45	46	47
SINBAR CHESTER	1.5	LB/A	PRE	100	100	100	100	100
SINBAR CAROLINE	1.5	LB/A	PRE	100	100	100	100	100
SINBAR NOVA	1.5	LB/A	PRE	100	100	100	100	100
SURFLAN CHESTER	6	QT/A	PRE	100	75	100	100	100
SURFLAN CAROLINE	6	QT/A	PRE	100	100	100	75	100
SURFLAN NOVA	6	QT/A	PRE	100	100	75	100	100
LSD (P=.05)				23	24	23	17	17
Standard Deviation				16	17	16	12	12
CV				20	21	20	14	14

The Ohio State University

CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009 Study Dir.: Doug Doohan and T.Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Objective: To evaluate Reflex for use in cucurbit production.

TRIAL SUMMARY: This trial evaluated two rates of Reflex (16 and 32 fl oz/A) alone and in combination with Dual Magnum and Outlook for crop injury and weed control in cucumber, squash and pumpkin. These were preemergent applications and results indicate that Reflex can provide very good weed control and yield along with low crop injury especially in squash and pumpkin. Cucumbers are very sensitive to this herbicide at the high rate.

TRIAL LOCATION

City: Wooster Trial Status: Final
State/Prov.: OH Trial Reliability: Reliable
Postal Code: 44691 Initiation Date: 06/08/09
Country: USA Planned Completion Date: 10/31/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	AGRASS	foxtail, crabgrass spp.	*Setaria, Digitaria spp.*
2	AMAXX	pigweed	*Amaranthus spp.*
3	AMBEL	common ragweed	*Ambrosia artemisiifolia L.*
4	CHEAL	common lambsquarter	*Chenopodim album L.*
5	POROL	common purslane	*Portulaca oleracea L.*

Crop 1: CUMSA CUCUMBER Variety: IMPROVED LONG GREEN
Planting Date: 06/08/09 Planting Method: HAND
Rate: 1 SEED/FT Depth: 1 IN
Row Spacing: 8 FT Spacing Within Row: 12 IN Seed Bed: CONVENTIONAL
Soil Temperature: 68 F Soil Moisture: MOIST Emergence Date: 06/18/09

Crop 2: CUUPE PUMPKIN Variety: SMALL SUGAR
Planting Date: 06/08/09 Planting Method: HAND
Rate: 1 SEED/FT Depth: 1 IN
Row Spacing: 8 FT Spacing Within Row: 12 IN Seed Bed: CONVENTIONAL
Soil Temperature: 68 F Soil Moisture: MOIST Emergence Date: 06/18/09

Crop 3: CUUPM SQUASH Variety: YELLOW CROOKNECK
Planting Date: 06/08/09 Planting Method: HAND
Rate: 1 SEED/FT Depth: 1 IN
Row Spacing: 8 FT Spacing Within Row: 12 IN Seed Bed: CONVENTIONAL
Soil Temperature: 68 F Soil Moisture: MOIST Emergence Date: 06/18/09

The Ohio State University

CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
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Investigator: Doug Doohan

SITE AND DESIGN

Plot Width, Unit: 6 FT
Plot Length, Unit: 25 FT
Site Type: LEVEL FIELD
Reps: 4
Tillage Type: CONVENTIONAL
Study Design: SPLIT-PLOT

SOIL DESCRIPTION

% Sand: 15	% OM: 3	Texture: SILT LOAM
% Silt: 70	pH: 6.9	Soil Name: WOOSTER SILT LOAM
% Clay: 15	CEC: 8.5	Fert. Level: MODERATE

APPLICATION DESCRIPTION

	A
Application Date:	6/10/2009
Time of Day:	8:30 AM
Application Method:	SPRAY
Application Timing:	PRE
Applic. Placement:	BROADCAST
Air Temp., Unit:	66.7 F
% Relative Humidity:	79.7
Wind Velocity, Unit:	0 MPH
Dew Presence (Y/N):	N
Soil Moisture:	MOIST
% Cloud Cover:	100

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	CUMSA, PRE
Stage Scale:	.
Height, Unit:	0. .
Crop 2 Code, Stage:	CUUPE, PRE
Stage Scale:	.
Height, Unit:	0. .
Crop 3 Code, Stage:	CUUPM, PRE
Stage Scale:	.
Height, Unit:	0. .

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	AMAXX, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 2 Code, Stage:	CHEAL, PRE
Stage Scale:	.
Density, Unit:	. .

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Trial ID: CURWCCTDSW 2009 Study Dir.: Doug Doohan and T.Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Weed 3 Code, Stage:	POROL, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 4 Code, Stage:	AMBEL, PRE
Stage Scale:	.
Density, Unit:	. .
Weed 5 Code, Stage:	AGRASS, PRE
Stage Scale:	.
Density, Unit:	. .

APPLICATION EQUIPMENT

	A
Appl. Equipment:	BACKPACK
Operating Pressure:	40
Nozzle Type:	FLATFAN
Nozzle Size:	8002VS
Nozzle Spacing, Unit:	19 IN
Nozzles/Row:	4
Band Width, Unit:	76 IN
Boom Height, Unit:	18 IN
Ground Speed, Unit:	2.5 MPH
Spray Volume, Unit:	25 GPA
Propellant:	CO2

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Weed Code							AGRASS	CHEAL	AMAXX	POROL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	WEED	WEED
Rating Data Type				STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				PER PLOT	%	%	%	%	%	%
Rating Date				6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
UNTREATED CONTROL SUMMER SQUASH				17	0	0	0	0	0	0
UNTREATED CONTROL CUKE				15	0	0	0	0	0	0
UNTREATED CONTROL PUMPKIN				17	0	0	0	0	0	0
WEED FREE CONTROL SUMMER SQUASH				16	0	0	100	100	100	100
WEED FREE CONTROL CUKE				14	0	0	100	100	100	100
WEED FREE CONTROL PUMPKIN				17	0	0	100	100	100	100
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	14	0	0	100	100	100	100
REFLEX CUKE	16	FL OZ/A	PRE	17	0	3	100	100	100	100
REFLEX PUMPKIN	16	FL OZ/A	PRE	18	0	0	100	100	100	100
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	16	0	0	100	100	100	100
REFLEX CUKE	32	FL OZ/A	PRE	16	0	3	100	100	100	100
REFLEX PUMPKIN	32	FL OZ/A	PRE	19	0	0	100	100	100	100

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Investigator: Doug Doohan

Weed Code							AGRASS	CHEAL	AMAXX	POROL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	WEED	WEED
Rating Data Type				STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				PER PLOT	%	%	%	%	%	%
Rating Date				6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
REFLEX +	16	FL OZ/A	PRE	16	0	0	100	100	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	13	0	1	100	100	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	19	0	0	100	100	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	32	FL OZ/A	PRE	16	0	0	100	100	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	13	0	6	100	100	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	17	0	0	100	100	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	16	FL OZ/A	PRE	15	0	0	100	100	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	13	0	4	100	100	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	17	0	0	100	100	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										

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Weed Code							AGRASS	CHEAL	AMAXX	POROL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	WEED	WEED
Rating Data Type				STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				PER PLOT	%	%	%	%	%	%
Rating Date				6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
REFLEX +	32	FL OZ/A	PRE	16	0	0	100	100	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	12	0	6	100	100	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	17	0	0	100	100	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										
DUAL MAGNUM	16	FL OZ/A	PRE	17	0	0	100	100	100	100
SUMMER SQUASH										
DUAL MAGNUM	16	FL OZ/A	PRE	14	0	1	100	100	100	100
CUKE										
DUAL MAGNUM	16	FL OZ/A	PRE	18	0	0	100	100	100	100
PUMPKIN										
OUTLOOK	14.1	FL OZ/A	PRE	15	0	0	100	100	100	100
SUMMER SQUASH										
OUTLOOK	14.1	FL OZ/A	PRE	16	0	0	100	100	100	100
CUKE										
OUTLOOK	14.1	FL OZ/A	PRE	18	0	0	100	100	100	100
PUMPKIN										
COMMAND+	9	FL OZ/A	PRE	17	0	0	100	100	100	100
CURBIT	29.9	FL OZ/A	PRE							
SUMMER SQUASH										

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Weed Code							AGRASS	CHEAL	AMAXX	POROL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	WEED	WEED
Rating Data Type				STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				PER PLOT	%	%	%	%	%	%
Rating Date				6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09	6/17/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
COMMAND+	9	FL OZ/A	PRE	16	0	1	100	100	100	100
CURBIT	29.9	FL OZ/A	PRE							
CUKE										
COMMAND+	9	FL OZ/A	PRE	18	0	0	100	100	100	100
CURBIT	29.9	FL OZ/A	PRE							
PUMPKIN										
LSD (P=.05)				3	0	3	0	0	0	0
Standard Deviation				2	0	2	0	0	0	0
CV				12	0	259	0	0	0	0

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Investigator: Doug Doohan

Weed Code				AMBEL				AGRASS	CHEAL	AMAXX
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	PLANT	PLANT	PLANT	WEED	WEED	WEED
Rating Data Type				CONTROL	STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL
Rating Unit				%	PER PLOT	%	%	%	%	%
Rating Date				6/17/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09
Trt-Eval Interval				1 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
UNTREATED CONTROL SUMMER SQUASH				0	17	0	0	0	0	0
UNTREATED CONTROL CUKE				0	16	0	0	0	0	0
UNTREATED CONTROL PUMPKIN				0	18	0	0	0	0	0
WEED FREE CONTROL SUMMER SQUASH				100	16	0	0	100	100	100
WEED FREE CONTROL CUKE				100	15	0	0	100	100	100
WEED FREE CONTROL PUMPKIN				100	18	0	0	100	100	100
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	100	14	6	30	96	99	99
REFLEX CUKE	16	FL OZ/A	PRE	100	13	48	61	96	99	99
REFLEX PUMPKIN	16	FL OZ/A	PRE	100	18	10	21	96	99	99
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	100	13	21	59	99	99	99
REFLEX CUKE	32	FL OZ/A	PRE	100	2	94	90	99	99	99
REFLEX PUMPKIN	32	FL OZ/A	PRE	100	17	15	59	99	99	99

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Weed Code				AMBEL				AGRASS	CHEAL	AMAXX
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	PLANT	PLANT	PLANT	WEED	WEED	WEED
Rating Data Type				CONTROL	STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL
Rating Unit				%	PER PLOT	%	%	%	%	%
Rating Date				6/17/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09
Trt-Eval Interval				1 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
REFLEX +	16	FL OZ/A	PRE	100	16	4	19	99	99	99
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	100	6	51	89	99	99	99
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	100	19	6	31	99	99	99
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	32	FL OZ/A	PRE	100	14	14	50	99	99	99
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	100	2	85	93	99	99	99
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	100	16	28	63	99	99	99
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	16	FL OZ/A	PRE	100	15	9	30	99	99	99
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	100	5	68	80	99	99	99
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	100	17	6	26	99	99	99
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										

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Weed Code				AMBEL				AGRASS	CHEAL	AMAXX
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	PLANT	PLANT	PLANT	WEED	WEED	WEED
Rating Data Type				CONTROL	STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL
Rating Unit				%	PER PLOT	%	%	%	%	%
Rating Date				6/17/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09
Trt-Eval Interval				1 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
REFLEX +	32	FL OZ/A	PRE	100	14	16	43	99	99	99
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	100	1	96	96	99	99	99
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	100	15	20	61	99	99	99
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										
DUAL MAGNUM	16	FL OZ/A	PRE	100	17	0	9	99	99	99
SUMMER SQUASH										
DUAL MAGNUM	16	FL OZ/A	PRE	100	14	4	11	99	99	99
CUKE										
DUAL MAGNUM	16	FL OZ/A	PRE	100	19	1	10	99	99	99
PUMPKIN										
OUTLOOK	14.1	FL OZ/A	PRE	100	15	3	14	99	99	99
SUMMER SQUASH										
OUTLOOK	14.1	FL OZ/A	PRE	100	17	1	18	99	99	99
CUKE										
OUTLOOK	14.1	FL OZ/A	PRE	100	18	1	13	99	99	99
PUMPKIN										
COMMAND+	9	FL OZ/A	PRE	100	18	0	4	99	99	99
CURBIT	29.9	FL OZ/A	PRE							
SUMMER SQUASH										

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Weed Code				AMBEL				AGRASS	CHEAL	AMAXX
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	PLANT	PLANT	PLANT	WEED	WEED	WEED
Rating Data Type				CONTROL	STAND COUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL
Rating Unit				%	PER PLOT	%	%	%	%	%
Rating Date				6/17/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09	6/22/09
Trt-Eval Interval				1 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT	2 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13	14
COMMAND+	9	FL OZ/A	PRE	100	16	4	0	99	99	99
CURBIT	29.9	FL OZ/A	PRE							
CUKE										
COMMAND+	9	FL OZ/A	PRE	100	19	0	0	99	99	99
CURBIT	29.9	FL OZ/A	PRE							
PUMPKIN										
LSD (P=.05)				0	3	14	17	3	0	0
Standard Deviation				0	2	10	12	2	0	0
CV				0	14	52	38	2	0	0

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Investigator: Doug Doohan

Weed Code				POROL	AMBEL				AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	PLANT	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/22/09	6/22/09	7/1/09	7/1/09	7/1/09	7/1/09	7/1/09
Trt-Eval Interval				2 WAT	2 WAT	3 WAT	3 WAT	3 WAT	3 WAT	3 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
UNTREATED CONTROL SUMMER SQUASH				0	0	0	0	0	0	0
UNTREATED CONTROL CUKE				0	0	0	0	0	0	0
UNTREATED CONTROL PUMPKIN				0	0	0	0	0	0	0
WEED FREE CONTROL SUMMER SQUASH				100	100	0	0	0	100	100
WEED FREE CONTROL CUKE				100	100	0	0	0	100	100
WEED FREE CONTROL PUMPKIN				100	100	0	0	0	100	100
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	99	99	0	30	0	93	98
REFLEX CUKE	16	FL OZ/A	PRE	99	99	10	74	0	96	99
REFLEX PUMPKIN	16	FL OZ/A	PRE	99	99	0	23	0	90	95
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	99	99	0	50	0	96	100
REFLEX CUKE	32	FL OZ/A	PRE	99	99	0	98	0	98	100
REFLEX PUMPKIN	32	FL OZ/A	PRE	99	99	0	44	9	98	100

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Weed Code				POROL	AMBEL				AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	PLANT	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/22/09	6/22/09	7/1/09	7/1/09	7/1/09	7/1/09	7/1/09
Trt-Eval Interval				2 WAT	2 WAT	3 WAT	3 WAT	3 WAT	3 WAT	3 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
REFLEX +	16	FL OZ/A	PRE	99	99	0	30	0	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	99	99	0	93	0	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	99	99	0	24	8	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	32	FL OZ/A	PRE	99	99	5	48	4	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	99	99	3	96	8	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	99	99	0	45	13	100	100
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	16	FL OZ/A	PRE	99	99	0	48	3	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	99	99	0	91	0	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	99	99	1	30	6	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										

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Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				POROL	AMBEL				AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	PLANT	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/22/09	6/22/09	7/1/09	7/1/09	7/1/09	7/1/09	7/1/09
Trt-Eval Interval				2 WAT	2 WAT	3 WAT	3 WAT	3 WAT	3 WAT	3 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
REFLEX +	32	FL OZ/A	PRE	99	99	4	61	0	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	99	99	3	98	0	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	99	99	3	51	15	100	100
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										
DUAL MAGNUM	16	FL OZ/A	PRE	99	99	0	21	4	100	25
SUMMER SQUASH										
DUAL MAGNUM	16	FL OZ/A	PRE	99	99	11	36	3	100	24
CUKE										
DUAL MAGNUM	16	FL OZ/A	PRE	99	99	0	14	6	100	8
PUMPKIN										
OUTLOOK	14.1	FL OZ/A	PRE	99	99	3	38	0	100	25
SUMMER SQUASH										
OUTLOOK	14.1	FL OZ/A	PRE	99	99	13	49	0	100	5
CUKE										
OUTLOOK	14.1	FL OZ/A	PRE	99	99	0	35	5	100	0
PUMPKIN										
COMMAND+	9	FL OZ/A	PRE	99	99	0	24	1	100	96
CURBIT	29.9	FL OZ/A	PRE							
SUMMER SQUASH										

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				POROL	AMBEL				AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	PLANT	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/22/09	6/22/09	7/1/09	7/1/09	7/1/09	7/1/09	7/1/09
Trt-Eval Interval				2 WAT	2 WAT	3 WAT	3 WAT	3 WAT	3 WAT	3 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
COMMAND+	9	FL OZ/A	PRE	99	99	4	14	0	96	75
CURBIT	29.9	FL OZ/A	PRE							
CUKE										
COMMAND+	9	FL OZ/A	PRE	99	99	0	19	0	96	100
CURBIT	29.9	FL OZ/A	PRE							
PUMPKIN										
LSD (P=.05)				0	0	5	14	8	5	24
Standard Deviation				0	0	4	10	5	3	18
CV				0	0	208	25	218	4	24

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
Weed Code				AMAXX	POROL	AMBEL				AGRASS
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	PLANT	PLANT	PLANT	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/1/09	7/1/09	7/1/09	7/6/09	7/6/09	7/6/09	7/6/09
Trt-Eval Interval				3 WAT	3 WAT	3 WAT	4 WAT	4 WAT	4 WAT	4 WAT
UNTREATED CONTROL SUMMER SQUASH				0	0	0	0	0	0	0
UNTREATED CONTROL CUKE				0	0	0	0	0	0	0
UNTREATED CONTROL PUMPKIN				0	0	0	0	0	0	0
WEED FREE CONTROL SUMMER SQUASH				100	100	100	0	0	0	100
WEED FREE CONTROL CUKE				100	100	100	0	0	0	100
WEED FREE CONTROL PUMPKIN				100	100	100	0	0	0	100
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	75	75	100	0	16	0	80
REFLEX CUKE	16	FL OZ/A	PRE	100	100	100	0	50	0	81
REFLEX PUMPKIN	16	FL OZ/A	PRE	100	100	100	4	11	3	79
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	100	100	100	0	24	0	94
REFLEX CUKE	32	FL OZ/A	PRE	100	100	100	0	96	25	95
REFLEX PUMPKIN	32	FL OZ/A	PRE	100	100	100	0	15	0	98

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				AMAXX	POROL	AMBEL				AGRASS
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	PLANT	PLANT	PLANT	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/1/09	7/1/09	7/1/09	7/6/09	7/6/09	7/6/09	7/6/09
Trt-Eval Interval				3 WAT	3 WAT	3 WAT	4 WAT	4 WAT	4 WAT	4 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
REFLEX +	16	FL OZ/A	PRE	100	100	100	0	11	0	98
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	100	100	100	0	85	0	98
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	100	100	100	0	5	0	99
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	32	FL OZ/A	PRE	100	100	100	0	24	0	99
DUAL MAGNUM	16	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	100	100	100	0	99	0	100
DUAL MAGNUM	16	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	100	100	100	0	21	0	99
DUAL MAGNUM	16	FL OZ/A	PRE							
PUMPKIN										
REFLEX +	16	FL OZ/A	PRE	100	100	100	0	19	0	99
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	16	FL OZ/A	PRE	100	100	100	0	74	0	99
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	16	FL OZ/A	PRE	100	100	100	1	11	3	99
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				AMAXX	POROL	AMBEL				AGRASS
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	PLANT	PLANT	PLANT	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/1/09	7/1/09	7/1/09	7/6/09	7/6/09	7/6/09	7/6/09
Trt-Eval Interval				3 WAT	3 WAT	3 WAT	4 WAT	4 WAT	4 WAT	4 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
REFLEX +	32	FL OZ/A	PRE	100	100	100	0	31	0	99
OUTLOOK	14.1	FL OZ/A	PRE							
SUMMER SQUASH										
REFLEX +	32	FL OZ/A	PRE	100	100	100	3	90	0	100
OUTLOOK	14.1	FL OZ/A	PRE							
CUKE										
REFLEX +	32	FL OZ/A	PRE	100	100	100	1	23	3	99
OUTLOOK	14.1	FL OZ/A	PRE							
PUMPKIN										
DUAL MAGNUM	16	FL OZ/A	PRE	100	100	100	0	10	0	98
SUMMER SQUASH										
DUAL MAGNUM	16	FL OZ/A	PRE	100	100	100	3	26	0	99
CUKE										
DUAL MAGNUM	16	FL OZ/A	PRE	100	100	100	0	4	0	98
PUMPKIN										
OUTLOOK	14.1	FL OZ/A	PRE	100	100	100	0	16	0	98
SUMMER SQUASH										
OUTLOOK	14.1	FL OZ/A	PRE	100	100	100	0	38	0	97
CUKE										
OUTLOOK	14.1	FL OZ/A	PRE	100	100	100	0	8	0	98
PUMPKIN										
COMMAND+	9	FL OZ/A	PRE	100	100	100	0	13	0	98
CURBIT	29.9	FL OZ/A	PRE							
SUMMER SQUASH										

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				AMAXX	POROL	AMBEL				AGRASS
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	PLANT	PLANT	PLANT	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	LEAF CURL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/1/09	7/1/09	7/1/09	7/6/09	7/6/09	7/6/09	7/6/09
Trt-Eval Interval				3 WAT	3 WAT	3 WAT	4 WAT	4 WAT	4 WAT	4 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26	27	28
COMMAND+	9	FL OZ/A	PRE	100	100	100	0	21	0	94
CURBIT	29.9	FL OZ/A	PRE							
CUKE										
COMMAND+	9	FL OZ/A	PRE	100	100	97	0	8	0	95
CURBIT	29.9	FL OZ/A	PRE							
PUMPKIN										
LSD (P=.05)				12	12	1	2	13	13	12
Standard Deviation				9	9	1	1	9	9	8
CV				10	10	1	413	35	919	9

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				CHEAL	AMAXX	POROL	AMBEL			AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	WEED	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				7/6/09	7/6/09	7/6/09	7/6/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				4 WAT	4 WAT	4 WAT	4 WAT	6 WAT	6 WAT	6 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35	36
UNTREATED CONTROL SUMMER SQUASH				0	0	0	0	0	5	0	0
UNTREATED CONTROL CUKE				0	0	0	0	0	13	0	0
UNTREATED CONTROL PUMPKIN				0	0	0	0	0	5	0	0
WEED FREE CONTROL SUMMER SQUASH				100	100	100	100	0	0	100	100
WEED FREE CONTROL CUKE				100	100	100	100	0	0	100	100
WEED FREE CONTROL PUMPKIN				100	100	100	100	0	0	100	100
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	97	98	98	98	0	9	80	86
REFLEX CUKE	16	FL OZ/A	PRE	96	98	99	98	3	14	80	93
REFLEX PUMPKIN	16	FL OZ/A	PRE	91	97	98	97	0	8	62	93
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	98	99	99	99	0	24	96	99
REFLEX CUKE	32	FL OZ/A	PRE	98	98	99	99	0	90	95	95
REFLEX PUMPKIN	32	FL OZ/A	PRE	99	99	99	99	0	16	94	97

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				CHEAL	AMAXX	POROL	AMBEL			AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	WEED	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				7/6/09	7/6/09	7/6/09	7/6/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				4 WAT	4 WAT	4 WAT	4 WAT	6 WAT	6 WAT	6 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35	36
REFLEX +	16	FL OZ/A	PRE	99	99	99	99	1	16	99	96
DUAL MAGNUM	16	FL OZ/A	PRE								
SUMMER SQUASH											
REFLEX +	16	FL OZ/A	PRE	99	99	99	99	0	48	99	100
DUAL MAGNUM	16	FL OZ/A	PRE								
CUKE											
REFLEX +	16	FL OZ/A	PRE	99	99	99	99	1	9	99	99
DUAL MAGNUM	16	FL OZ/A	PRE								
PUMPKIN											
REFLEX +	32	FL OZ/A	PRE	99	99	99	99	0	19	100	100
DUAL MAGNUM	16	FL OZ/A	PRE								
SUMMER SQUASH											
REFLEX +	32	FL OZ/A	PRE	100	100	100	100	0	83	100	100
DUAL MAGNUM	16	FL OZ/A	PRE								
CUKE											
REFLEX +	32	FL OZ/A	PRE	99	99	99	99	3	25	100	100
DUAL MAGNUM	16	FL OZ/A	PRE								
PUMPKIN											
REFLEX +	16	FL OZ/A	PRE	99	99	99	99	0	19	100	100
OUTLOOK	14.1	FL OZ/A	PRE								
SUMMER SQUASH											
REFLEX +	16	FL OZ/A	PRE	99	99	99	99	1	40	100	99
OUTLOOK	14.1	FL OZ/A	PRE								
CUKE											
REFLEX +	16	FL OZ/A	PRE	99	99	99	99	0	16	100	100
OUTLOOK	14.1	FL OZ/A	PRE								
PUMPKIN											

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				CHEAL	AMAXX	POROL	AMBEL			AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	WEED	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				7/6/09	7/6/09	7/6/09	7/6/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				4 WAT	4 WAT	4 WAT	4 WAT	6 WAT	6 WAT	6 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35	36
REFLEX +	32	FL OZ/A	PRE	99	99	99	99	0	24	100	100
OUTLOOK	14.1	FL OZ/A	PRE								
SUMMER SQUASH											
REFLEX +	32	FL OZ/A	PRE	100	100	100	100	0	63	100	100
OUTLOOK	14.1	FL OZ/A	PRE								
CUKE											
REFLEX +	32	FL OZ/A	PRE	99	99	99	99	0	26	100	100
OUTLOOK	14.1	FL OZ/A	PRE								
PUMPKIN											
DUAL MAGNUM	16	FL OZ/A	PRE	68	94	90	94	0	9	99	45
SUMMER SQUASH											
DUAL MAGNUM	16	FL OZ/A	PRE	58	94	94	94	0	19	100	53
CUKE											
DUAL MAGNUM	16	FL OZ/A	PRE	61	92	91	92	0	8	100	45
PUMPKIN											
OUTLOOK	14.1	FL OZ/A	PRE	75	97	97	97	0	16	100	56
SUMMER SQUASH											
OUTLOOK	14.1	FL OZ/A	PRE	69	98	98	98	0	13	96	50
CUKE											
OUTLOOK	14.1	FL OZ/A	PRE	70	98	98	98	0	6	100	55
PUMPKIN											
COMMAND+	9	FL OZ/A	PRE	95	83	99	98	0	5	100	90
CURBIT	29.9	FL OZ/A	PRE								
SUMMER SQUASH											

The Ohio State University

CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				CHEAL	AMAXX	POROL	AMBEL			AGRASS	CHEAL
Crop Code				CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB	CUCURB
Part Rated				WEED	WEED	WEED	WEED	PLANT	PLANT	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CHLOROSIS	STUNT	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				7/6/09	7/6/09	7/6/09	7/6/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				4 WAT	4 WAT	4 WAT	4 WAT	6 WAT	6 WAT	6 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	29	30	31	32	33	34	35	36
COMMAND+	9	FL OZ/A	PRE	87	84	94	94	0	5	100	91
CURBIT	29.9	FL OZ/A	PRE								
CUKE											
COMMAND+	9	FL OZ/A	PRE	94	89	99	97	0	15	98	93
CURBIT	29.9	FL OZ/A	PRE								
PUMPKIN											
LSD (P=.05)				7	6	5	5	2	19	12	13
Standard Deviation				5	4	4	4	1	13	9	9
CV				6	5	4	4	536	66	10	12

The Ohio State University

CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				AMAXX	POROL	AMBEL					
Crop Code				CUCURB	CUCURB	CUCURB	CUMSA	CUMSA	CUMSA	CUMSA	CUMSA
Part Rated				WEED	WEED	WEED	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				CONTROL	CONTROL	CONTROL	NO.	NO.	NO.	NO.	NO.
Rating Unit				%	%	%	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date				7/22/09	7/22/09	7/22/09	8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				6 WAT	6 WAT	6 WAT	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	37	38	39	40	41	42	43	44
UNTREATED CONTROL SUMMER SQUASH				0	0	0					
UNTREATED CONTROL CUKE				0	0	0	2	1	1	0	0
UNTREATED CONTROL PUMPKIN				0	0	0					
WEED FREE CONTROL SUMMER SQUASH				100	100	100					
WEED FREE CONTROL CUKE				100	100	100	2	3	1	0	0
WEED FREE CONTROL PUMPKIN				100	100	100					
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	100	100	98					
REFLEX CUKE	16	FL OZ/A	PRE	100	99	98	2	2	2	0	0
REFLEX PUMPKIN	16	FL OZ/A	PRE	93	100	97					
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	100	100	99					
REFLEX CUKE	32	FL OZ/A	PRE	100	100	99					
REFLEX PUMPKIN	32	FL OZ/A	PRE	100	95	99					

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Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				AMAXX	POROL	AMBEL					
Crop Code				CUCURB	CUCURB	CUCURB	CUMSA	CUMSA	CUMSA	CUMSA	CUMSA
Part Rated				WEED	WEED	WEED	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				CONTROL	CONTROL	CONTROL	NO.	NO.	NO.	NO.	NO.
Rating Unit				%	%	%	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date				7/22/09	7/22/09	7/22/09	8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				6 WAT	6 WAT	6 WAT	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	37	38	39	40	41	42	43	44
REFLEX +	16	FL OZ/A	PRE	100	100	99					
DUAL MAGNUM	16	FL OZ/A	PRE								
SUMMER SQUASH											
REFLEX +	16	FL OZ/A	PRE	78	100	99	2	0	0	0	1
DUAL MAGNUM	16	FL OZ/A	PRE								
CUKE											
REFLEX +	16	FL OZ/A	PRE	100	100	99					
DUAL MAGNUM	16	FL OZ/A	PRE								
PUMPKIN											
REFLEX +	32	FL OZ/A	PRE	100	100	99					
DUAL MAGNUM	16	FL OZ/A	PRE								
SUMMER SQUASH											
REFLEX +	32	FL OZ/A	PRE	100	100	100					
DUAL MAGNUM	16	FL OZ/A	PRE								
CUKE											
REFLEX +	32	FL OZ/A	PRE	100	100	99					
DUAL MAGNUM	16	FL OZ/A	PRE								
PUMPKIN											
REFLEX +	16	FL OZ/A	PRE	100	100	99					
OUTLOOK	14.1	FL OZ/A	PRE								
SUMMER SQUASH											
REFLEX +	16	FL OZ/A	PRE	100	100	99					
OUTLOOK	14.1	FL OZ/A	PRE								
CUKE											
REFLEX +	16	FL OZ/A	PRE	100	100	99					
OUTLOOK	14.1	FL OZ/A	PRE								
PUMPKIN											

The Ohio State University

CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				AMAXX	POROL	AMBEL					
Crop Code				CUCURB	CUCURB	CUCURB	CUMSA	CUMSA	CUMSA	CUMSA	CUMSA
Part Rated				WEED	WEED	WEED	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				CONTROL	CONTROL	CONTROL	NO.	NO.	NO.	NO.	NO.
Rating Unit				%	%	%	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date				7/22/09	7/22/09	7/22/09	8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				6 WAT	6 WAT	6 WAT	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	37	38	39	40	41	42	43	44
REFLEX + OUTLOOK SUMMER SQUASH	32 14.1	FL OZ/A FL OZ/A	PRE PRE	100	100	99					
REFLEX + OUTLOOK CUKE	32 14.1	FL OZ/A FL OZ/A	PRE PRE	100	100	100					
REFLEX + OUTLOOK PUMPKIN	32 14.1	FL OZ/A FL OZ/A	PRE PRE	100	100	99					
DUAL MAGNUM SUMMER SQUASH	16	FL OZ/A	PRE	98	78	94					
DUAL MAGNUM CUKE	16	FL OZ/A	PRE	100	80	94	2	0	1	0	0
DUAL MAGNUM PUMPKIN	16	FL OZ/A	PRE	100	76	92					
OUTLOOK SUMMER SQUASH	14.1	FL OZ/A	PRE	95	76	97					
OUTLOOK CUKE	14.1	FL OZ/A	PRE	100	78	98	2	0	1	0	0
OUTLOOK PUMPKIN	14.1	FL OZ/A	PRE	100	84	98					
COMMAND+ CURBIT SUMMER SQUASH	9 29.9	FL OZ/A FL OZ/A	PRE PRE	100	93	98					

The Ohio State University

CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				AMAXX	POROL	AMBEL					
Crop Code				CUCURB	CUCURB	CUCURB	CUMSA	CUMSA	CUMSA	CUMSA	CUMSA
Part Rated				WEED	WEED	WEED	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				CONTROL	CONTROL	CONTROL	NO.	NO.	NO.	NO.	NO.
Rating Unit				%	%	%	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date				7/22/09	7/22/09	7/22/09	8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				6 WAT	6 WAT	6 WAT	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	37	38	39	40	41	42	43	44
COMMAND+	9	FL OZ/A	PRE	93	88	94	2	2	2	0	0
CURBIT	29.9	FL OZ/A	PRE								
CUKE											
COMMAND+	9	FL OZ/A	PRE	95	90	97					
CURBIT	29.9	FL OZ/A	PRE								
PUMPKIN											
LSD (P=.05)				12	13	5	0	2	3	0	0
Standard Deviation				9	9	4	0	1	2	0	0
CV				10	10	4	0	121	161	648	0

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUMSA	CUMSA	CUMSA	CUMSA	**CUMSA**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	45	46	47	48	**49**
UNTREATED CONTROL SUMMER SQUASH								
UNTREATED CONTROL CUKE				0.1	0.2	0	0	**2**
UNTREATED CONTROL PUMPKIN								
WEED FREE CONTROL SUMMER SQUASH								
WEED FREE CONTROL CUKE				0.9	0.2	0	0	**4**
WEED FREE CONTROL PUMPKIN								
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE					
REFLEX CUKE	16	FL OZ/A	PRE	0.2	0.3	0	0	**4**
REFLEX PUMPKIN	16	FL OZ/A	PRE					
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE					
REFLEX CUKE	32	FL OZ/A	PRE					
REFLEX PUMPKIN	32	FL OZ/A	PRE					

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUMSA	CUMSA	CUMSA	CUMSA	**CUMSA**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	45	46	47	48	**49**
REFLEX + DUAL MAGNUM SUMMER SQUASH	16 16	FL OZ/A FL OZ/A	PRE PRE					
REFLEX + DUAL MAGNUM CUKE	16 16	FL OZ/A FL OZ/A	PRE PRE	0	0	0	0.3	**1**
REFLEX + DUAL MAGNUM PUMPKIN	16 16	FL OZ/A FL OZ/A	PRE PRE					
REFLEX + DUAL MAGNUM SUMMER SQUASH	32 16	FL OZ/A FL OZ/A	PRE PRE					
REFLEX + DUAL MAGNUM CUKE	32 16	FL OZ/A FL OZ/A	PRE PRE					
REFLEX + DUAL MAGNUM PUMPKIN	32 16	FL OZ/A FL OZ/A	PRE PRE					
REFLEX + OUTLOOK SUMMER SQUASH	16 14.1	FL OZ/A FL OZ/A	PRE PRE					
REFLEX + OUTLOOK CUKE	16 14.1	FL OZ/A FL OZ/A	PRE PRE					
REFLEX + OUTLOOK PUMPKIN	16 14.1	FL OZ/A FL OZ/A	PRE PRE					

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUMSA	CUMSA	CUMSA	CUMSA	**CUMSA**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	45	46	47	48	**49**
REFLEX +	32	FL OZ/A	PRE					
OUTLOOK	14.1	FL OZ/A	PRE					
SUMMER SQUASH								
REFLEX +	32	FL OZ/A	PRE					
OUTLOOK	14.1	FL OZ/A	PRE					
CUKE								
REFLEX +	32	FL OZ/A	PRE					
OUTLOOK	14.1	FL OZ/A	PRE					
PUMPKIN								
DUAL MAGNUM	16	FL OZ/A	PRE					
SUMMER SQUASH								
DUAL MAGNUM	16	FL OZ/A	PRE	0	0.1	0	0	**1**
CUKE								
DUAL MAGNUM	16	FL OZ/A	PRE					
PUMPKIN								
OUTLOOK	14.1	FL OZ/A	PRE					
SUMMER SQUASH								
OUTLOOK	14.1	FL OZ/A	PRE	0	0.1	0.1	0	**1**
CUKE								
OUTLOOK	14.1	FL OZ/A	PRE					
PUMPKIN								
COMMAND+	9	FL OZ/A	PRE					
CURBIT	29.9	FL OZ/A	PRE					
SUMMER SQUASH								

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUMSA	CUMSA	CUMSA	CUMSA	**CUMSA**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	45	46	47	48	**49**
COMMAND+	9	FL OZ/A	PRE	0.4	0.4	0	0	**4**
CURBIT	29.9	FL OZ/A	PRE					
CUKE								
COMMAND+	9	FL OZ/A	PRE					
CURBIT	29.9	FL OZ/A	PRE					
PUMPKIN								
LSD (P=.05)				1	0	0	0	
Standard Deviation				0	0	0	0	
CV				140	177	648	0	

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				**CUMSA**	CUUPM	CUUPM	CUUPM	CUUPM	CUUPM
Part Rated				**FRUIT**	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				**TOTAL MKTB YIELD**	NO.	NO.	NO.	NO.	NO.
Rating Unit				**KG/PLOT**	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date					8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				**HARVEST**	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**50**	51	52	53	54	55
UNTREATED CONTROL SUMMER SQUASH					2	0	1	0	0
UNTREATED CONTROL CUKE				**0.3**					
UNTREATED CONTROL PUMPKIN									
WEED FREE CONTROL SUMMER SQUASH					2	4	6	1	1
WEED FREE CONTROL CUKE				**1**					
WEED FREE CONTROL PUMPKIN									
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE		2	1	5	2	2
REFLEX CUKE	16	FL OZ/A	PRE	**0.4**					
REFLEX PUMPKIN	16	FL OZ/A	PRE						
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE		2	1	5	6	3
REFLEX CUKE	32	FL OZ/A	PRE						
REFLEX PUMPKIN	32	FL OZ/A	PRE						

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				**CUMSA**	CUUPM	CUUPM	CUUPM	CUUPM	CUUPM
Part Rated				**FRUIT**	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				**TOTAL MKTB YIELD**	NO.	NO.	NO.	NO.	NO.
Rating Unit				**KG/PLOT**	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date					8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				**HARVEST**	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**50**	51	52	53	54	55
REFLEX +	16	FL OZ/A	PRE		2	2	4	4	4
DUAL MAGNUM	16	FL OZ/A	PRE						
SUMMER SQUASH									
REFLEX +	16	FL OZ/A	PRE	**0.3**					
DUAL MAGNUM	16	FL OZ/A	PRE						
CUKE									
REFLEX +	16	FL OZ/A	PRE						
DUAL MAGNUM	16	FL OZ/A	PRE						
PUMPKIN									
REFLEX +	32	FL OZ/A	PRE		2	0	5	5	2
DUAL MAGNUM	16	FL OZ/A	PRE						
SUMMER SQUASH									
REFLEX +	32	FL OZ/A	PRE		2	0	5	2	4
DUAL MAGNUM	16	FL OZ/A	PRE						
CUKE									
REFLEX +	32	FL OZ/A	PRE						
DUAL MAGNUM	16	FL OZ/A	PRE						
PUMPKIN									
REFLEX +	16	FL OZ/A	PRE		2	0	4	3	2
OUTLOOK	14.1	FL OZ/A	PRE						
SUMMER SQUASH									
REFLEX +	16	FL OZ/A	PRE						
OUTLOOK	14.1	FL OZ/A	PRE						
CUKE									
REFLEX +	16	FL OZ/A	PRE						
OUTLOOK	14.1	FL OZ/A	PRE						
PUMPKIN									

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				**CUMSA**	CUUPM	CUUPM	CUUPM	CUUPM	CUUPM
Part Rated				**FRUIT**	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				**TOTAL MKTB YIELD**	NO.	NO.	NO.	NO.	NO.
Rating Unit				**KG/PLOT**	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date					8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				**HARVEST**	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**50**	51	52	53	54	55
REFLEX +	32	FL OZ/A	PRE		2	1	5	1	2
OUTLOOK	14.1	FL OZ/A	PRE						
SUMMER SQUASH									
REFLEX +	32	FL OZ/A	PRE						
OUTLOOK	14.1	FL OZ/A	PRE						
CUKE									
REFLEX +	32	FL OZ/A	PRE						
OUTLOOK	14.1	FL OZ/A	PRE						
PUMPKIN									
DUAL MAGNUM	16	FL OZ/A	PRE		2	2	4	0	1
SUMMER SQUASH									
DUAL MAGNUM	16	FL OZ/A	PRE	**0.1**					
CUKE									
DUAL MAGNUM	16	FL OZ/A	PRE						
PUMPKIN									
OUTLOOK	14.1	FL OZ/A	PRE		2	1	5	3	1
SUMMER SQUASH									
OUTLOOK	14.1	FL OZ/A	PRE	**0.2**					
CUKE									
OUTLOOK	14.1	FL OZ/A	PRE						
PUMPKIN									
COMMAND+	9	FL OZ/A	PRE		2	1	4	3	2
CURBIT	29.9	FL OZ/A	PRE						
SUMMER SQUASH									

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				**CUMSA**	CUUPM	CUUPM	CUUPM	CUUPM	CUUPM
Part Rated				**FRUIT**	PLANT	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				**TOTAL MKTB YIELD**	NO.	NO.	NO.	NO.	NO.
Rating Unit				**KG/PLOT**	PER PLOT	PER PLOT	PER PLOT	PER PLOT	PER PLOT
Rating Date					8/5/09	8/5/09	8/12/09	8/19/09	8/26/09
Trt-Eval Interval				**HARVEST**	HARV1	HARV1	HARV2	HARV3	HARV4
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**50**	51	52	53	54	55
COMMAND+ CURBIT CUKE	9 29.9	FL OZ/A FL OZ/A	PRE PRE	**0.8**					
COMMAND+ CURBIT PUMPKIN	9 29.9	FL OZ/A FL OZ/A	PRE PRE						
LSD (P=.05)				**1**	1	2	4	4	2
Standard Deviation				**0**	0	1	3	3	1
CV				**100**	16	127	68	101	64

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUUPM	CUUPM	CUUPM	CUUPM	**CUUPM**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	56	57	58	59	**60**
UNTREATED CONTROL SUMMER SQUASH				0	0.3	0.1	0.1	**1**
UNTREATED CONTROL CUKE								
UNTREATED CONTROL PUMPKIN								
WEED FREE CONTROL SUMMER SQUASH				0.7	2.1	0.5	0.3	**12**
WEED FREE CONTROL CUKE								
WEED FREE CONTROL PUMPKIN								
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	0.2	1.6	0.7	0.6	**10**
REFLEX CUKE	16	FL OZ/A	PRE					
REFLEX PUMPKIN	16	FL OZ/A	PRE					
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	0.3	1.3	2.9	1.2	**15**
REFLEX CUKE	32	FL OZ/A	PRE					
REFLEX PUMPKIN	32	FL OZ/A	PRE					

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUUPM	CUUPM	CUUPM	CUUPM	**CUUPM**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	56	57	58	59	**60**
REFLEX +	16	FL OZ/A	PRE	0.4	1.4	2.1	1.4	**14**
DUAL MAGNUM	16	FL OZ/A	PRE					
SUMMER SQUASH								
REFLEX +	16	FL OZ/A	PRE					
DUAL MAGNUM	16	FL OZ/A	PRE					
CUKE								
REFLEX +	16	FL OZ/A	PRE					
DUAL MAGNUM	16	FL OZ/A	PRE					
PUMPKIN								
REFLEX +	32	FL OZ/A	PRE	0	1.6	2.1	1	**12**
DUAL MAGNUM	16	FL OZ/A	PRE					
SUMMER SQUASH								
REFLEX +	32	FL OZ/A	PRE	0	1.9	0.5	2.4	**11**
DUAL MAGNUM	16	FL OZ/A	PRE					
CUKE								
REFLEX +	32	FL OZ/A	PRE					
DUAL MAGNUM	16	FL OZ/A	PRE					
PUMPKIN								
REFLEX +	16	FL OZ/A	PRE	0	1.1	1.4	0.8	**9**
OUTLOOK	14.1	FL OZ/A	PRE					
SUMMER SQUASH								
REFLEX +	16	FL OZ/A	PRE					
OUTLOOK	14.1	FL OZ/A	PRE					
CUKE								
REFLEX +	16	FL OZ/A	PRE					
OUTLOOK	14.1	FL OZ/A	PRE					
PUMPKIN								

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUUPM	CUUPM	CUUPM	CUUPM	**CUUPM**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	56	57	58	59	**60**
REFLEX +	32	FL OZ/A	PRE	0.2	1.4	0.4	0.4	**9**
OUTLOOK	14.1	FL OZ/A	PRE					
SUMMER SQUASH								
REFLEX +	32	FL OZ/A	PRE					
OUTLOOK	14.1	FL OZ/A	PRE					
CUKE								
REFLEX +	32	FL OZ/A	PRE					
OUTLOOK	14.1	FL OZ/A	PRE					
PUMPKIN								
DUAL MAGNUM	16	FL OZ/A	PRE	0.3	1.2	0.2	0.1	**7**
SUMMER SQUASH								
DUAL MAGNUM	16	FL OZ/A	PRE					
CUKE								
DUAL MAGNUM	16	FL OZ/A	PRE					
PUMPKIN								
OUTLOOK	14.1	FL OZ/A	PRE	0.2	1.5	1.3	0.4	**10**
SUMMER SQUASH								
OUTLOOK	14.1	FL OZ/A	PRE					
CUKE								
OUTLOOK	14.1	FL OZ/A	PRE					
PUMPKIN								
COMMAND+	9	FL OZ/A	PRE	0.2	0.9	1	0.5	**10**
CURBIT	29.9	FL OZ/A	PRE					
SUMMER SQUASH								

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				CUUPM	CUUPM	CUUPM	CUUPM	**CUUPM**
Part Rated				FRUIT	FRUIT	FRUIT	FRUIT	**FRUIT**
Rating Data Type				MKTB YIELD	MKTB YIELD	MKTB YIELD	MKTB YIELD	**TOTAL MKTB NO.**
Rating Unit				KG/PLOT	KG/PLOT	KG/PLOT	KG/PLOT	**PER PLOT**
Rating Date				8/5/09	8/12/09	8/19/09	8/26/09	
Trt-Eval Interval				HARV1	HARV2	HARV3	HARV4	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	56	57	58	59	**60**
COMMAND+ CURBIT CUKE	9 29.9	FL OZ/A FL OZ/A	PRE PRE					
COMMAND+ CURBIT PUMPKIN	9 29.9	FL OZ/A FL OZ/A	PRE PRE					
LSD (P=.05)				0	1	1	1	
Standard Deviation				0	1	1	0	
CV				150	72	84	60	

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				**CUUPM**	**CUUPE**	**CUUPE**
Part Rated				**FRUIT**	**FRUIT**	**FRUIT**
Rating Data Type				**TOTAL MKTB YIELD**	**TOTAL MKTB NO.**	**TOTAL MKTB YIELD**
Rating Unit				**KG/PLOT**	**PER PLOT**	**LB/PLOT**
Rating Date					**10/14/09**	**10/14/09**
Trt-Eval Interval				**HARVEST**	**HARVEST**	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**61.0**	**62**	**63.0**
UNTREATED CONTROL SUMMER SQUASH				**0.5**		
UNTREATED CONTROL CUKE						
UNTREATED CONTROL PUMPKIN					**10**	**33.4**
WEED FREE CONTROL SUMMER SQUASH				**3.6**		
WEED FREE CONTROL CUKE						
WEED FREE CONTROL PUMPKIN					**27**	**116.8**
REFLEX SUMMER SQUASH	16	FL OZ/A	PRE	**3.2**		
REFLEX CUKE	16	FL OZ/A	PRE			
REFLEX PUMPKIN	16	FL OZ/A	PRE		**29**	**107.9**
REFLEX SUMMER SQUASH	32	FL OZ/A	PRE	**5.7**		
REFLEX CUKE	32	FL OZ/A	PRE			
REFLEX PUMPKIN	32	FL OZ/A	PRE		**28**	**110.1**

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				**CUUPM**	**CUUPE**	**CUUPE**
Part Rated				**FRUIT**	**FRUIT**	**FRUIT**
Rating Data Type				**TOTAL MKTB YIELD**	**TOTAL MKTB NO.**	**TOTAL MKTB YIELD**
Rating Unit				**KG/PLOT**	**PER PLOT**	**LB/PLOT**
Rating Date					**10/14/09**	**10/14/09**
Trt-Eval Interval				**HARVEST**	**HARVEST**	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**61.0**	**62**	**63.0**
REFLEX +	16	FL OZ/A	PRE	**5.3**		
DUAL MAGNUM	16	FL OZ/A	PRE			
SUMMER SQUASH						
REFLEX +	16	FL OZ/A	PRE			
DUAL MAGNUM	16	FL OZ/A	PRE			
CUKE						
REFLEX +	16	FL OZ/A	PRE		**28**	**113.4**
DUAL MAGNUM	16	FL OZ/A	PRE			
PUMPKIN						
REFLEX +	32	FL OZ/A	PRE	**4.7**		
DUAL MAGNUM	16	FL OZ/A	PRE			
SUMMER SQUASH						
REFLEX +	32	FL OZ/A	PRE	**4.8**		
DUAL MAGNUM	16	FL OZ/A	PRE			
CUKE						
REFLEX +	32	FL OZ/A	PRE		**32**	**117.7**
DUAL MAGNUM	16	FL OZ/A	PRE			
PUMPKIN						
REFLEX +	16	FL OZ/A	PRE	**3.4**		
OUTLOOK	14.1	FL OZ/A	PRE			
SUMMER SQUASH						
REFLEX +	16	FL OZ/A	PRE			
OUTLOOK	14.1	FL OZ/A	PRE			
CUKE						
REFLEX +	16	FL OZ/A	PRE		**27**	**104.9**
OUTLOOK	14.1	FL OZ/A	PRE			
PUMPKIN						

The Ohio State University

CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				**CUUPM**	**CUUPE**	**CUUPE**
Part Rated				**FRUIT**	**FRUIT**	**FRUIT**
Rating Data Type				**TOTAL MKTB YIELD**	**TOTAL MKTB NO.**	**TOTAL MKTB YIELD**
Rating Unit				**KG/PLOT**	**PER PLOT**	**LB/PLOT**
Rating Date					**10/14/09**	**10/14/09**
Trt-Eval Interval				**HARVEST**	**HARVEST**	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**61.0**	**62**	**63.0**
REFLEX +	32	FL OZ/A	PRE	**2.4**		
OUTLOOK	14.1	FL OZ/A	PRE			
SUMMER SQUASH						
REFLEX +	32	FL OZ/A	PRE			
OUTLOOK	14.1	FL OZ/A	PRE			
CUKE						
REFLEX +	32	FL OZ/A	PRE		**24**	**90.1**
OUTLOOK	14.1	FL OZ/A	PRE			
PUMPKIN						
DUAL MAGNUM	16	FL OZ/A	PRE	**1.8**		
SUMMER SQUASH						
DUAL MAGNUM	16	FL OZ/A	PRE			
CUKE						
DUAL MAGNUM	16	FL OZ/A	PRE		**21**	**72.5**
PUMPKIN						
OUTLOOK	14.1	FL OZ/A	PRE	**3.3**		
SUMMER SQUASH						
OUTLOOK	14.1	FL OZ/A	PRE			
CUKE						
OUTLOOK	14.1	FL OZ/A	PRE		**24**	**88.0**
PUMPKIN						
COMMAND+	9	FL OZ/A	PRE	**2.6**		
CURBIT	29.9	FL OZ/A	PRE			
SUMMER SQUASH						

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CUCURBITS - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: CURWCCTDSW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				**CUUPM**	**CUUPE**	**CUUPE**
Part Rated				**FRUIT**	**FRUIT**	**FRUIT**
Rating Data Type				**TOTAL MKTB YIELD**	**TOTAL MKTB NO.**	**TOTAL MKTB YIELD**
Rating Unit				**KG/PLOT**	**PER PLOT**	**LB/PLOT**
Rating Date					**10/14/09**	**10/14/09**
Trt-Eval Interval				**HARVEST**	**HARVEST**	**HARVEST**
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	**61.0**	**62**	**63.0**
COMMAND+ CURBIT CUKE	9 29.9	FL OZ/A FL OZ/A	PRE PRE			
COMMAND+ CURBIT PUMPKIN	9 29.9	FL OZ/A FL OZ/A	PRE PRE		**32**	**122.1**
LSD (P=.05)				**1.7**	**9**	**40.0**
Standard Deviation				**1.2**	**6**	**27.7**
CV				**34.5**	**24**	**28.3**

The Ohio State University

GRAPES - RESPONSE OF SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Objective: To evaluate simulated herbicide drift using dicamba, 2-4,D, and glyphosate on American and vinifera grapes.

TRIAL SUMMARY: This was a simulated drift trial using greenhouse grown plants. Results indicate that the vinifera type of grapes is the most sensitive to herbicide drift, followed by the American type. At 4 weeks after treatment, dicamba as low as 1/300 of the standard field rate caused 25% leaf curl and 20% plant stunt with Cabernet Franc. Evaluation will continue next year for growth and possible fruiting.

TRIAL LOCATION

City: Wooster
State/Prov.: Ohio
Postal Code: 44691
Planned Completion Date: 09/30/09

Trial Status: Final
Trial Reliability: Reliable
Initiation Date: 07/09/09

Crop 1: VITLA GRAPE (AMERICAN) Variety: CONCORD
Planting Date: 03/15/09 Planting Method: HAND
Rate: 1 PER 6" POT Depth: 2 IN Perennial Age: 1 YEAR

Crop 2: VITVI GRAPE (VINIFERA) Variety: PINOT GRIGIO
Planting Date: 04/15/08 Planting Method: HAND
Rate: 1 PER 6" POT Depth: 2 IN Perennial Age: 2 YEAR

Crop 3: VITVI GRAPE (VINIFERA) Variety: CABERNET FRANC
Planting Date: 04/15/08 Planting Method: HAND
Rate: 1 PER 6" POT Depth: 2 IN Perennial Age: 2 YEAR

SITE AND DESIGN

Plot Width, Unit: 10 FT
Site Type: GREENHOUSE
Tillage Type: NONE

Plot Length, Unit: 10 FT
Reps: 3
Study Design: SPLIT-PLOT

SOIL DESCRIPTION

Texture: PEAT/PERLITE
pH: 6.0

Soil Name: PRO MIX BX
Fert. Level: MODERATE

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GRAPES - RESPONSE OF SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

APPLICATION DESCRIPTION

	A
Application Date:	7/9/2009
Time of Day:	9 -11 AM
Application Method:	SPRAY
Application Timing:	POST
Applic. Placement:	BROADCAST
Air Temp., Unit:	70 F
% Relative Humidity:	50
Wind Velocity, Unit:	0 MPH
Soil Moisture:	MOIST
% Cloud Cover:	0

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	VITLA, POST
Stage Scale:	VEGETATIVE
Height, Unit:	24-30 IN
Crop 2 Code, Stage:	VITVI, POST
Stage Scale:	VEGETATIVE
Height, Unit:	24-30 IN
Crop 3 Code, Stage:	VITVI, POST
Stage Scale:	VEGETATIVE
Height, Unit:	24-30 IN

APPLICATION EQUIPMENT

	A
Operating Pressure:	40
Nozzle Type:	FLAT FAN
Nozzle Size:	8002VS
Nozzle Spacing, Unit:	18 IN
Nozzles/Row:	2
Band Width, Unit:	36 IN
Boom Height, Unit:	18 IN
Ground Speed, Unit:	2.6 MPH
Spray Volume, Unit:	25 GPA

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GRAPES - RESPONSE TO SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				VITLA	VITLA	VITLA	VITLA	VITLA	VITLA
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	CHLOROSIS	CURL	STUNT	BURN	CHLOROSIS
Rating Unit				%	%	%	%	%	%
Rating Date				7/16/09	7/16/09	7/16/09	7/16/09	7/23/09	7/23/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	2 WAT	2 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
UNTREATED CONTROL CABERNET FRANC				0	0	0	0	0	0
UNTREATED CONTROL CONCORD				0	0	0	0	0	0
UNTREATED CONTROL PINOT GRIGIO				7	5	0	0	0	0
CLARITY (1/100 X)+	0.16	OZ/A	POST	3	3	10	0	2	15
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
CLARITY (1/100 X)+	0.16	OZ/A	POST	7	5	12	2	3	7
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
CLARITY (1/100 X)+	0.16	OZ/A	POST	17	2	13	0	5	8
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
CLARITY (1/300 X)	0.053	OZ/A	POST	3	5	15	0	3	18
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
CLARITY (1/300 X)	0.053	OZ/A	POST	5	5	13	2	0	8
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									

The Ohio State University

GRAPES - RESPONSE TO SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				VITLA	VITLA	VITLA	VITLA	VITLA	VITLA
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	CHLOROSIS	CURL	STUNT	BURN	CHLOROSIS
Rating Unit				%	%	%	%	%	%
Rating Date				7/16/09	7/16/09	7/16/09	7/16/09	7/23/09	7/23/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	2 WAT	2 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
CLARITY (1/300 X)	0.053	OZ/A	POST	10	3	22	0	5	8
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
WEEDAR 64(1/100 X)	0.25	OZ/A	POST	5	3	10	0	3	8
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
WEEDAR 64(1/100 X)	0.25	OZ/A	POST	10	7	22	0	8	12
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
WEEDAR 64(1/100 X)	0.25	OZ/A	POST	8	5	8	0	7	10
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
WEEDAR 64 (1/300 X)	0.083	OZ/A	POST	5	5	5	0	2	8
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
WEEDAR 64 (1/300 X)	0.083	OZ/A	POST	5	3	12	2	3	13
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
WEEDAR 64 (1/300 X)	0.083	OZ/A	POST	17	5	7	0	5	7
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									

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GRAPES - RESPONSE TO SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				VITLA	VITLA	VITLA	VITLA	VITLA	VITLA
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	CHLOROSIS	CURL	STUNT	BURN	CHLOROSIS
Rating Unit				%	%	%	%	%	%
Rating Date				7/16/09	7/16/09	7/16/09	7/16/09	7/23/09	7/23/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	2 WAT	2 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
ROUNDUP W/M (1/100 X)	0.174	OZ/A	POST	5	3	0	0	2	3
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
ROUNDUP W/M (1/100 X)	0.174	OZ/A	POST	7	5	5	2	0	8
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
ROUNDUP W/M (1/100 X)	0.174	OZ/A	POST	8	10	5	0	12	13
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
ROUNDUP W/M (1/300 X)	0.058	OZ/A	POST	7	3	0	0	0	5
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
ROUNDUP W/M (1/300 X)	0.058	OZ/A	POST	10	5	3	2	3	5
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
ROUNDUP W/M (1/300 X)	0.058	OZ/A	POST	7	7	2	0	13	10
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
LSD (P=.05)				6	7	8	2	5	9
Standard Deviation				4	5	5	1	3	5
CV				57	105	61	317	77	65

The Ohio State University

GRAPES - RESPONSE TO SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				VITLA	VITLA	VITLA	VITLA	VITLA	VITLA
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				CURL	STUNT	BURN	CHLOROSIS	CURL	STUNT
Rating Unit				%	%	%	%	%	%
Rating Date				7/23/09	7/23/09	8/6/09	8/6/09	8/6/09	8/6/09
Trt-Eval Interval				2 WAT	2 WAT	4 WAT	4 WAT	4 WAT	4 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
UNTREATED CONTROL CABERNET FRANC				0	0	0	0	0	0
UNTREATED CONTROL CONCORD				0	0	0	0	0	0
UNTREATED CONTROL PINOT GRIGIO				0	0	0	0	0	0
CLARITY (1/100 X)+	0.16	OZ/A	POST	32	33	2	15	32	33
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
CLARITY (1/100 X)+	0.16	OZ/A	POST	23	8	3	7	23	8
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
CLARITY (1/100 X)+	0.16	OZ/A	POST	12	12	5	8	12	12
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
CLARITY (1/300 X)	0.053	OZ/A	POST	27	17	3	18	27	17
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
CLARITY (1/300 X)	0.053	OZ/A	POST	18	7	0	8	18	7
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									

The Ohio State University

GRAPES - RESPONSE TO SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				VITLA	VITLA	VITLA	VITLA	VITLA	VITLA
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				CURL	STUNT	BURN	CHLOROSIS	CURL	STUNT
Rating Unit				%	%	%	%	%	%
Rating Date				7/23/09	7/23/09	8/6/09	8/6/09	8/6/09	8/6/09
Trt-Eval Interval				2 WAT	2 WAT	4 WAT	4 WAT	4 WAT	4 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
CLARITY (1/300 X)	0.053	OZ/A	POST	13	15	5	8	13	15
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
WEEDAR 64(1/100 X)	0.25	OZ/A	POST	0	13	3	8	0	13
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
WEEDAR 64(1/100 X)	0.25	OZ/A	POST	13	0	8	12	13	0
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
WEEDAR 64(1/100 X)	0.25	OZ/A	POST	12	7	7	10	12	7
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
WEEDAR 64 (1/300 X)	0.083	OZ/A	POST	2	13	2	8	2	13
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
WEEDAR 64 (1/300 X)	0.083	OZ/A	POST	18	13	3	13	18	13
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
WEEDAR 64 (1/300 X)	0.083	OZ/A	POST	8	7	5	7	8	7
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									

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GRAPES - RESPONSE TO SIMULATED DRIFT OF 2, 4-D AND DICAMBA

Trial ID: GRAPEHERDRIFTW 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				VITLA	VITLA	VITLA	VITLA	VITLA	VITLA
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				CURL	STUNT	BURN	CHLOROSIS	CURL	STUNT
Rating Unit				%	%	%	%	%	%
Rating Date				7/23/09	7/23/09	8/6/09	8/6/09	8/6/09	8/6/09
Trt-Eval Interval				2 WAT	2 WAT	4 WAT	4 WAT	4 WAT	4 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
ROUNDUP W/M (1/100 X)	0.174	OZ/A	POST	0	0	2	3	0	0
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
ROUNDUP W/M (1/100 X)	0.174	OZ/A	POST	5	0	0	8	5	0
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
ROUNDUP W/M (1/100 X)	0.174	OZ/A	POST	0	0	12	13	0	0
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
ROUNDUP W/M (1/300 X)	0.058	OZ/A	POST	3	3	0	5	3	3
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CABERNET FRANC									
ROUNDUP W/M (1/300 X)	0.058	OZ/A	POST	0	0	3	5	0	0
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
CONCORD									
ROUNDUP W/M (1/300 X)	0.058	OZ/A	POST	2	0	13	10	2	0
NIS+	0.5	PT/A	POST						
AMS	2.5	LB/A	POST						
PINOT GRIGIO									
LSD (P=.05)				6	11	5	9	6	11
Standard Deviation				4	7	3	5	4	7
CV				39	94	77	65	39	94

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GREEN ASH - CONTROL WITH KJM-44 (2008-2009)

Trial ID: GRASHKJM440809 Study Dir.: Doug Doohan and T.Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Objective: To evaluate low to medium rates of KJM-44 in combination with Escort, Krenite, and Imazapyr (low rate) for industrial brush control.

TRIAL SUMMARY: All herbicide treatments were effective in completely killing the green ash seedlings one year from application except for KJM 44 at 35.4 g/A.

TRIAL LOCATION

City: Wooster
State/Prov.: Ohio
Postal Code: 44691
Country: USA

Trial Status: Final
Trial Reliability: Reliable
Initiation Date: 07/01/08
Planned Completion Date: 07/01/09

Weed 1: FRXPS ASH Variety: GREEN
Planting Method: NATURAL SEEDING
Perennial Age: 3 YRS

SITE AND DESIGN

Plot Width, Unit: 10 FT
Site Type: FIELD
Tillage Type: NONE

Plot Length, Unit: 10 FT
Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 11
% Silt: 75
% Clay: 14

% OM: 3.0
pH: 6.0
CEC: 12

Texture: SILT LOAM
Soil Name: WOOSTER SILT LOAM
Fert. Level: MODERATE

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	FRXPS, POST
Stage Scale:	FULL LEAF
Height, Unit:	3 FT

APPLICATION EQUIPMENT

	A
Appl. Equipment:	BACKPACK
Operating Pressure:	35
Nozzle Type:	FLAT FAN
Nozzle Size:	8003EVS
Nozzle Spacing, Unit:	1
Band Width, Unit:	24 IN
Spray Volume, Unit:	25 GPA
Propellant:	CO2

The Ohio State University

GREEN ASH - CONTROL
WITH KJM-44 (2008-2009)

Trial ID: GRASHKJM440809
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				FRXPS	FRXPS	FRXPS	FRXPS	FRXPS	FRXPS	FRXPS
Crop Code										
Part Rated				LEAVES	LEAVES	LEAVES	LEAVES	LEAVES	LEAVES	LEAVES
Rating Data Type				INJURY	CHLOROSIS	LOST	LEFT	GREEN	YELLOW	DEAD
Rating Unit				%	%	%	%	%	%	%
Rating Date				8/11/08	8/11/08	10/1/08	10/1/08	10/1/08	10/1/08	10/1/08
Trt-Eval Interval				45 DAT	45 DAT	90 DAT	90 DAT	90 DAT	90 DAT	90 DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
UNTREATED CONTROL				0	0	28	73	53	9	11
KJM 44+	35.4	G/A	POST	8	11	54	46	25	9	36
MSO	2	PT/A	POST							
KJM 44+	71	G/A	POST	76	13	78	23	1	1	54
MSO	2	PT/A	POST							
KJM 44+	106	G/A	POST	49	34	76	24	0	0	75
MSO	2	PT/A	POST							
KJM 44+	35.4	G/A	POST	88	15	48	52	0	0	100
ESCORT+	56.7	G/A	POST							
MSO	2	PT/A	POST							
KJM 44+	71	G/A	POST	93	0	89	8	0	0	50
ESCORT+	56.7	G/A	POST							
MSO	2	PT/A	POST							
KJM 44+	35.4	G/A	POST	10	8	63	37	14	16	31
ARSENAL+	3540	G/A	POST							
MSO	2	PT/A	POST							
KJM 44+	71	G/A	POST	14	24	38	63	0	3	98
ARSENAL+	3540	G/A	POST							
MSO	2	PT/A	POST							

The Ohio State University

GREEN ASH - CONTROL
WITH KJM-44 (2008-2009)

Trial ID: GRASHKJM440809
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				FRXPS	FRXPS	FRXPS	FRXPS	FRXPS	FRXPS	FRXPS
Crop Code										
Part Rated				LEAVES	LEAVES	LEAVES	LEAVES	LEAVES	LEAVES	LEAVES
Rating Data Type				INJURY	CHLOROSIS	LOST	LEFT	GREEN	YELLOW	DEAD
Rating Unit				%	%	%	%	%	%	%
Rating Date				8/11/08	8/11/08	10/1/08	10/1/08	10/1/08	10/1/08	10/1/08
Trt-Eval Interval				45 DAT	45 DAT	90 DAT	90 DAT	90 DAT	90 DAT	90 DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
KJM 44+	35.4	G/A	POST	13	30	69	31	19	6	30
KRENITE S+	12	PT/A	POST							
MSO	2	PT/A	POST							
KJM 44+	71	G/A	POST	25	41	95	5	25	0	25
KRENITE S+	12	PT/A	POST							
MSO	2	PT/A	POST							
LSD (P=.05)				30	32	43	43	31	15	64
Standard Deviation				21	22	30	30	21	10	44
CV				55	125	47	83	154	231	86

The Ohio State University

GREEN ASH - CONTROL
WITH KJM-44 (2008-2009)

Trial ID: GRASHKJM440809
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				FRXPS	FRXPS	FRXPS	FRXPS	FRXPS
Crop Code								
Part Rated				LEADER	LEAVES	BUD	TREE	TREE
Rating Data Type				DEAD	LEAF FALL	DEAD	DEAD	DEAD
Rating Unit				%	%	%	%	%
Rating Date				10/1/08	3/27/09	3/27/09	3/27/09	7/1/09
Trt-Eval Interval				90 DAT	269 DAT	269 DAT	269 DAT	365 DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12
UNTREATED CONTROL				0	0	0	0	0
KJM 44+	35.4	G/A	POST	100	100	100	30	55
MSO	2	PT/A	POST					
KJM 44+	71	G/A	POST	100	100	100	45	95
MSO	2	PT/A	POST					
KJM 44+	106	G/A	POST	100	98	100	53	100
MSO	2	PT/A	POST					
KJM 44+	35.4	G/A	POST	100	100	100	76	100
ESCORT+	56.7	G/A	POST					
MSO	2	PT/A	POST					
KJM 44+	71	G/A	POST	100	100	100	75	95
ESCORT+	56.7	G/A	POST					
MSO	2	PT/A	POST					
KJM 44+	35.4	G/A	POST	100	99	100	41	100
ARSENAL+	3540	G/A	POST					
MSO	2	PT/A	POST					
KJM 44+	71	G/A	POST	100	100	100	53	100
ARSENAL+	3540	G/A	POST					
MSO	2	PT/A	POST					

The Ohio State University

GREEN ASH - CONTROL
WITH KJM-44 (2008-2009)

Trial ID: GRASHKJM440809
Location: Wooster, Ohio
Study Dir.: Doug Doohan and T.Koch
Investigator: Doug Doohan

Weed Code				FRXPS	FRXPS	FRXPS	FRXPS	FRXPS
Crop Code								
Part Rated				LEADER	LEAVES	BUD	TREE	TREE
Rating Data Type				DEAD	LEAF FALL	DEAD	DEAD	DEAD
Rating Unit				%	%	%	%	%
Rating Date				10/1/08	3/27/09	3/27/09	3/27/09	7/1/09
Trt-Eval Interval				90 DAT	269 DAT	269 DAT	269 DAT	365 DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12
KJM 44+	35.4	G/A	POST	100	100	85	53	100
KRENITE S+	12	PT/A	POST					
MSO	2	PT/A	POST					
KJM 44+	71	G/A	POST	100	100	100	59	100
KRENITE S+	12	PT/A	POST					
MSO	2	PT/A	POST					
LSD (P=.05)				0	3	14	30	9
Standard Deviation				0	2	10	21	6
CV				0	2	11	43	7

The Ohio State University

GREEN ONIONS - WEED CONTROL AND CROP TOLERANCE WITH PROWL H_2O AND GOALTENDER

Trial ID: GRONWCCTPRH2OGT 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Willard, Ohio Investigator: Doug Doohan

Objective: Collect phytotoxicity data to support pesticide registation for pendimethalin on green bunching onions, and to evaluate rates and timings of Goaltender for crop injury and weed control.

Trial Summary: Three Prowl H_2O treatments were evaluated ; a separate 2 and 4 pt/A PRE application, and a 2 pt/A split-application (PRE & POST). No crop injury was observed. Weed control was poor in general; the split application being the best of the three. Yields were low due to poor weed control. Goaltender was applied POST at 1, 2, 3, and 6 oz/A; the 2 and 3 oz/A rate provided very good weed control and yield. The high rate had excellent weed control but possible yield loss.

TRIAL LOCATION

City: Willard Trial Status: Final
State/Prov.: Ohio Trial Reliability: Reliable
Postal Code: 44890 Initiation Date: 08/25/09
Country: USA Planned Completion Date: 10/26/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	AMABL	prostrate pigweed	*Amaranthus graecizans auct, non L.*
2	POROL	Common purslane	*Portulaca oleraea L.*

Crop 1: ALLCE GREEN ONION Variety: FEAST
Planting Date: 08/25/09 Planting Method: CONVENTIONAL
Rate: 11 SEEDS/FT Depth: 0.25 IN
Row Spacing: 5 FT Spacing Within Row: 1 IN
Soil Temperature: 75.3 F Soil Moisture: DRY
Seed Bed: CONVENTIONAL Emergence Date: 09/09/09

SITE AND DESIGN

Plot Width, Unit: 5 FT Plot Length, Unit: 25 FT
Site Type: LEVEL FIELD Reps: 4
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 64	% OM: 47.9	Texture: MUCK
% Silt: 31	pH: 5.4	Soil Name: LINWOOD MUCK
% Clay: 5	CEC: 70.3	Fert. Level: HIGH

The Ohio State University

GREEN ONIONS - WEED CONTROL AND CROP TOLERANCE WITH PROWL H_2O AND GOALTENDER

Trial ID: GRONWCCTPRH2OGT 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Willard, Ohio Investigator: Doug Doohan

APPLICATION DESCRIPTION

	A	B
Application Date:	8/26/2009	9/18/2009
Time of Day:	11:30 AM	10: 30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	76.3 F	64.2 F
% Relative Humidity:	71.67	85.5
Wind Velocity, Unit:	8.1 MPH	1.9 MPH
Soil Temp., Unit:	77.0 F	73.8 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	50	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ALLCE, PRE	ALLCE, POST
Stage Scale:	.	2-3 LEAF
Height, Unit:	0. .	3.5 INCH

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	POROL, PRE	POROL, POST
Stage Scale:	.	6" DIAMETER
Density, Unit:	. .	MEDIUM, PLOT
Weed 2 Code, Stage:	AMABL, PRE	AMABL, POST
Stage Scale:	.	6" DIAMETER
Density, Unit:	. .	MEDIUM, PLOT

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK
Operating Pressure:	40	40
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002VS	8002VS
Nozzle Spacing, Unit:	15 IN	15 IN
Nozzles/Row:	4	4
Band Width, Unit:	60 IN	60 IN
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	3.1 MPH	3.1 MPH
Spray Volume, Unit:	25 GPA	25 GPA
Propellant:	CO2	CO2

The Ohio State University

GREEN ONIONS - WEED CONTROL AND CROP TOLERANCE WITH PROWL H_2O AND GOALTENDER

Trial ID: GRONWCCTPRH2OGT 2009
Location: Willard, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code							AMABL	POROL		
Crop Code				ALLCE	ALLCE	ALLCE	ALLCE	ALLCE	ALLCE	ALLCE
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	PLANT	PLANT
Rating Data Type				CHLOROSIS	BURN	STUNT	CONTROL	CONTROL	CHLOROSIS	BURN
Rating Unit				%	%	%	%	%	%	%
Rating Date				9/2/09	9/2/09	9/2/09	9/2/09	9/2/09	9/18/09	9/18/09
Trt-Eval Interval				1WATPRE	1WATPRE	1WATPRE	1WATPRE	1WATPRE	3WATPRE	3WATPRE
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7
UNTREATED CONTROL				0	0	0	0	0	0	0
WEED FREE CONTROL				0	0	0	99	99	0	0
PROWL H2O+	1.05	QT/A	PRE	0	0	0	0	0	0	0
PROWL H2O	1.05	QT/A	POST2LF							
PROWL H2O	1.05	QT/A	POST2LF							
PROWL H2O	2.1	QT/A	POST2LF							
GOALTENDER	1	FL OZ/A	POST 2LF							
GOALTENDER	2	FL OZ/A	POST 2LF							
GOALTENDER	3	FL OZ/A	POST 2LF							
GOALTENDER	6	FL OZ/A	POST 2LF							
LSD (P=.05)				0	0	0	0	0	0	0
Standard Deviation				0	0	0	0	0	0	0
CV				0	0	0	0	0	0	0

The Ohio State University

GREEN ONIONS - WEED CONTROL AND CROP TOLERANCE WITH PROWL H_2O AND GOALTENDER

Trial ID: GRONWCCTPRH2OGT 2009
Location: Willard, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code					AMABL	POROL			AMABL
Crop Code				ALLCE	ALLCE	ALLCE	ALLCE	ALLCE	ALLCE
Part Rated				PLANT	WEED	WEED	PLANT	PLANT	WEED
Rating Data Type				STUNT	CONTROL	CONTROL	BURN	STUNT	CONTROL
Rating Unit				%	%	%	%	%	%
Rating Date				9/18/09	9/18/09	9/18/09	9/25/09	9/25/09	9/25/09
Trt-Eval Interval				3WATPRE	3WATPRE	3WATPRE	1WATPOST	1WATPOST	1WATPOST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	8	9	10	11	12	13
UNTREATED CONTROL				0	0	0	0	0	0
WEED FREE CONTROL				0	99	99	0	0	74
PROWL H2O+	1.05	QT/A	PRE	0	19	58	0	0	23
PROWL H2O	1.05	QT/A	POST2LF						
PROWL H2O	1.05	QT/A	POST2LF				0	0	0
PROWL H2O	2.1	QT/A	POST2LF				0	0	3
GOALTENDER	1	FL OZ/A	POST 2LF				0	0	41
GOALTENDER	2	FL OZ/A	POST 2LF				0	0	64
GOALTENDER	3	FL OZ/A	POST 2LF				0	0	79
GOALTENDER	6	FL OZ/A	POST 2LF				1	10	96
LSD (P=.05)				0	9	10	1	2	32
Standard Deviation				0	5	6	1	1	22
CV				0	13	11	600	122	51

The Ohio State University

GREEN ONIONS - WEED CONTROL AND CROP TOLERANCE WITH PROWL H_2O AND GOALTENDER

Trial ID: GRONWCCTPRH2OGT 2009
Location: Willard, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				POROL			AMABL	POROL	
Crop Code				ALLCE	ALLCE	ALLCE	ALLCE	ALLCE	ALLCE
Part Rated				WEED	PLANT	PLANT	WEED	WEED	PLANT
Rating Data Type				CONTROL	BURN	STUNT	CONTROL	CONTROL	BURN
Rating Unit				%	%	%	%	%	%
Rating Date				9/25/09	10/2/09	10/2/09	10/2/09	10/2/09	10/16/09
Trt-Eval Interval				1WATPOST	2WATPOST	2WATPOST	2WATPOST	2WATPOST	4WATPOST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	14	15	16	17	18	19
UNTREATED CONTROL				0	0	0	0	0	0
WEED FREE CONTROL				96	0	0	100	100	0
PROWL H2O+	1.05	QT/A	PRE	64	0	0	76	73	0
PROWL H2O	1.05	QT/A	POST2LF						
PROWL H2O	1.05	QT/A	POST2LF	9	0	0	20	15	0
PROWL H2O	2.1	QT/A	POST2LF	25	0	0	48	45	0
GOALTENDER	1	FL OZ/A	POST 2LF	60	0	0	76	79	0
GOALTENDER	2	FL OZ/A	POST 2LF	85	0	0	93	93	0
GOALTENDER	3	FL OZ/A	POST 2LF	89	0	0	91	95	0
GOALTENDER	6	FL OZ/A	POST 2LF	100	0	6	96	99	0
LSD (P=.05)				14	0	1	26	21	0
Standard Deviation				10	0	1	18	14	0
CV				17	0	120	27	22	0

The Ohio State University

GREEN ONIONS - WEED CONTROL AND CROP TOLERANCE WITH PROWL H_2O AND GOALTENDER

Trial ID: GRONWCCTPRH2OGT 2009
Location: Willard, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code							
Crop Code				ALLCE	ALLCE	ALLCE	ALLCE
Part Rated				PLANT	PLANT	PLANT	PLANT
Rating Data Type				STUNT	TOTAL	TOTAL YIELD	50 PLANTS
Rating Unit				%	NO./PLOT	LBS/PLOT	LBS/PLOT
Rating Date				10/16/09	10/16/09	10/16/09	10/16/09
Trt-Eval Interval				4WATPOST	4WATPOST	4WATPOST	4WATPOST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	20	21	22	23
UNTREATED CONTROL				0	161	0.63	0.21
WEED FREE CONTROL				0	172	0.71	0.22
PROWL H2O+	1.05	QT/A	PRE	0	155	0.64	0.21
PROWL H2O	1.05	QT/A	POST2LF				
PROWL H2O	1.05	QT/A	POST2LF	0	174	0.76	0.21
PROWL H2O	2.1	QT/A	POST2LF	0	168	0.63	0.2
GOALTENDER	1	FL OZ/A	POST 2LF	0	181	0.69	0.19
GOALTENDER	2	FL OZ/A	POST 2LF	0	170	0.65	0.2
GOALTENDER	3	FL OZ/A	POST 2LF	0	175	0.64	0.19
GOALTENDER	6	FL OZ/A	POST 2LF	10	169	0.6	0.17
LSD (P=.05)				0	29	0	0
Standard Deviation				0	20	0	0
CV				0	12	14	13

The Ohio State University

GREENS (BRASSICA) - WEED CONTROL AND CROP TOLERANCE WITH PRE HERBICIDES

Trial ID: GRBRASSWCCT 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Willard, Ohio Investigator: Doug Doohan

Objective: To evaluate rates and timings of Dual Magnum, Spartan, Goaltender, and Prowl H_2O in regard to crop safety and weed control on collards and mustard greens.

Trial Summary: Collards were more tolerant of herbicides than mustard greens. Spartan at 9.6 oz/A was the best overall treatment for both crops and had the highest mustard green yield. Goaltender at 0.50 qt/A was the next best treatment and provide the highest collard yield.

TRIAL LOCATION

City: Willard Trial Status: Final
State/Prov.: Ohio Trial Reliability: Reliable
Postal Code: 44890 Initiation Date: 07/21/09
Country: USA Planned Completion Date: 10/30/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	AGRASS	crabgrass, foxtail..	*Digsa spp., Sertfa spp.*
2	AMAXX	Pigweed species	*Amaranth spp.*
3	GASCI	hairy galinsoga	*Galinsoga ciliata (Raf.) Blake*
4	POROL	common purslane	*Portulaca oleracea L.*

Crop 1: BRSOA COLLARD Variety: CHAMPION
Planting Date: 07/21/09 Planting Method: CONVENTIONAL
Rate: 12 SEEDS/FOOT Depth: 0.50 IN
Row Spacing: 18 INCH Spacing Within Row: 2 IN Seed Bed: CONVENTIONAL
Soil Temperature: 70.5 F Soil Moisture: DRY Emergence Date: 07/31/09

Crop 2: MUSGN MUSTARD GREEN Variety: SOUTHERN GIANT CURLED
Planting Date: 07/21/09 Planting Method: CONVENTIONAL
Rate: 12 SEEDS/FOOT Depth: 0.50 IN
Row Spacing: 18 INCH Spacing Within Row: 2 IN Seed Bed: CONVENTIONAL
Soil Temperature: 70.5 F Soil Moisture: DRY Emergence Date: 07/30/09

SITE AND DESIGN

Plot Width, Unit: 5 FT Plot Length, Unit: 25 FT
Site Type: LEVEL FIELD Reps: 4
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 64 % OM: 45.6 Texture: MUCK
% Silt: 31 pH: 5.5 Soil Name: LINWOOD MUCK
% Clay: 5 CEC: 69.9 Fert. Level: HIGH

The Ohio State University

GREENS (BRASSICA) - WEED CONTROL AND CROP TOLERANCE WITH PRE HERBICIDES

Trial ID: GRBRASSWCCT 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Willard, Ohio Investigator: Doug Doohan

APPLICATION DESCRIPTION

	A	B
Application Date:	7/22/2009	7/30/2009
Time of Day:	10 AM	2:30 PM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	65.8 F	78.7 F
% Relative Humidity:	93	59.4
Wind Velocity, Unit:	1.8 MPH	7.8 MPH
Soil Temp., Unit:	72.3 F	75.8 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	50	80

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	BRSOA, PRE	BRSOA, POST
Stage Scale:	.	4 LF
Height, Unit:	0. .	1 IN
Crop 2 Code, Stage:	MUSGN, PRE	MUSGN, POST
Stage Scale:	.	2 LF
Height, Unit:	0. .	0.5 IN

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AGRAS, PRE	AGRASS, POST
Stage Scale:	.	2 LF
Density, Unit:	. .	LOW PLOT
Weed 2 Code, Stage:	AMAXX, PRE	AMAXX, POST
Stage Scale:	.	1 TRUE LF
Density, Unit:	. .	HIGH PLOT
Weed 3 Code, Stage:	GASCI, PRE	GASCI, POST
Stage Scale:	.	.
Density, Unit:	. .	. .
Weed 4 Code, Stage:	POROL, PRE	POROL, POST
Stage Scale:	.	1 TRUE LF
Density, Unit:	. .	HIGH PLOT

The Ohio State University

GREENS (BRASSICA) - WEED CONTROL AND CROP TOLERANCE WITH PRE HERBICIDES

Trial ID: GRBRASSWCCT 2009
Location: Willard, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	40	40
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002VS	8002VS
Nozzle Spacing, Unit:	15 INCH	15 INCH
Nozzles/Row:	4	4
Band Width, Unit:	60 INCH	60 INCH
Boom Height, Unit:	15 INCH	15 INCH
Ground Speed, Unit:	3 MPH	3 MPH
Spray Volume, Unit:	25 GPA	25 GPA

The Ohio State University

GREENS (BRASSICA) - WEED CONTROL AND CROP TOLERANCE WITH PRE HERBICIDES

Trial ID: GRBRASSWCCT 2009
Location: Willard, Ohio
Study Dir.: Doug Doohan and T. Koch
Investigator: Doug Doohan

Weed Code						POROL	AMAXX	AGRASS	
Crop Code				MUSGN	BRSOA	ALL	ALL	ALL	MUSGN
Part Rated				PLANT	PLANT	WEED	WEED	WEED	PLANT
Rating Data Type				INJURY	INJURY	CONTROL	CONTROL	CONTROL	INJURY
Rating Unit				%	%	%	%	%	%
Rating Date				7/29/09	7/29/09	7/29/09	7/29/09	7/29/09	8/12/09
Trt-Eval Interval				1WATPRE	1WATPRE	1WATPRE	1WATPRE	1WATPRE	3WATPRE
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
HANDWEEDED CHECK				0	0	100	100	100	0
DUAL MAGNUM	0.525	QT/A	PRE	19	8	68	73	94	16
DUAL MAGNUM+	0.525	QT/A	PRE	16	0	83	74	94	14
DUAL MAGNUM	0.525	QT/A	POST						
SPARTAN	3.2	OZ/A	PRE	30	36	91	92	69	9
SPARTAN	4.8	OZ/A	PRE	50	51	97	97	72	48
SPARTAN	9.6	OZ/A	PRE	74	78	99	99	98	53
GOALTENDER	0.25	QT/A	PRE	29	14	96	97	97	26
GOALTENDER	0.5	QT/A	PRE	51	34	97	97	97	51
PROWL H2O	1.05	QT/A	PRE	3	11	3	3	73	13
PROWL H2O	2.1	QT/A	PRE	10	8	31	41	97	28
LSD (P=.05)				16	18	8	8	37	26
Standard Deviation				11	12	5	6	26	18
CV				40	51	7	7	29	70

The Ohio State University

GREENS (BRASSICA) - WEED CONTROL AND CROP TOLERANCE WITH PRE HERBICIDES

Trial ID: GRBRASSWCCT 2009
Location: Willard, Ohio
Study Dir.: Doug Doohan and T. Koch
Investigator: Doug Doohan

Weed Code					POROL	AMAXX	AGRASS		
Crop Code				BRSOA	ALL	ALL	ALL	MUSGN	BRSOA
Part Rated				PLANT	WEED	WEED	WEED	PLANT	PLANT
Rating Data Type				INJURY	CONTROL	CONTROL	CONTROL	INJURY	INJURY
Rating Unit				%	%	%	%	%	%
Rating Date				8/12/09	8/12/09	8/12/09	8/12/09	9/2/09	9/2/09
Trt-Eval Interval				3WATPRE	3WATPRE	3WATPRE	3WATPRE	6WATPRE	6WATPRE
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
HANDWEEDED CHECK				0	100	100	100	0	0
DUAL MAGNUM	0.525	QT/A	PRE	11	26	46	95	74	73
DUAL MAGNUM+	0.525	QT/A	PRE	0	54	61	99	58	48
DUAL MAGNUM	0.525	QT/A	POST						
SPARTAN	3.2	OZ/A	PRE	15	75	73	6	90	61
SPARTAN	4.8	OZ/A	PRE	36	73	75	16	74	65
SPARTAN	9.6	OZ/A	PRE	59	84	90	73	40	34
GOALTENDER	0.25	QT/A	PRE	9	74	63	74	79	65
GOALTENDER	0.5	QT/A	PRE	16	85	84	83	63	49
PROWL H2O	1.05	QT/A	PRE	10	0	6	85	65	81
PROWL H2O	2.1	QT/A	PRE	10	69	43	79	76	55
LSD (P=.05)				17	11	18	19	33	21
Standard Deviation				12	7	13	13	23	14
CV				72	11	20	18	37	27

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GREENS (BRASSICA) - WEED CONTROL AND CROP TOLERANCE WITH PRE HERBICIDES

Trial ID: GRBRASSWCCT 2009
Location: Willard, Ohio
Study Dir.: Doug Doohan and T. Koch
Investigator: Doug Doohan

Weed Code				POROL	AMAXX	AGRASS	GASCI		
Crop Code				ALL	ALL	ALL	ALL	MUSGN	BRSOA
Part Rated				WEED	WEED	WEED	WEED	PLANT	PLANT
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	MKTB YIELD	MKTB YIELD
Rating Unit				%	%	%	%	LBS/PLOT	LBS/PLOT
Rating Date				9/2/09	9/2/09	9/2/09	9/2/09	9/2/09	9/2/09
Trt-Eval Interval				6WATPRE	6WATPRE	6WATPRE	6WATPRE	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	13	14	15	16	17	18
HANDWEEDED CHECK				100	100	100	100	4	4
DUAL MAGNUM	0.525	QT/A	PRE	0	3	96	100	0	0
DUAL MAGNUM+	0.525	QT/A	PRE	0	15	100	100	1	2
DUAL MAGNUM	0.525	QT/A	POST						
SPARTAN	3.2	OZ/A	PRE	78	50	5	75	0	0
SPARTAN	4.8	OZ/A	PRE	76	79	0	0	0	0
SPARTAN	9.6	OZ/A	PRE	76	81	49	0	3	1
GOALTENDER	0.25	QT/A	PRE	58	0	83	100	0	0
GOALTENDER	0.5	QT/A	PRE	71	46	54	0	1	3
PROWL H2O	1.05	QT/A	PRE	25	18	95	0	1	1
PROWL H2O	2.1	QT/A	PRE	53	44	98	0	0	2
LSD (P=.05)				19	29	25	23	.	.
Standard Deviation				13	20	17	16	.	.
CV				24	46	25	33	.	.

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HICKORY - SUCKER CONTROL USING MAT28 WITH ESCORT AND ARSENAL

Trial ID: HBRUSHMAT28W 2009
Location: Wooster, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Objective: To evaluate rates of MAT28 in combination with Escort for industrial right- of- way and waxy leaf brush control.

TRIAL SUMMARY: Hickory sprouts from stumps were sprayed to runoff in late July 2009 with ten herbicide defoliant treatments. Results 90 days after treatment indicate the best treatment was Milestone (3.3 oz/A) + Roundup (52.4 oz/A) + Arsenal (6.4 oz/A), resulting in 89% defoiliation. The second best treatment was MAT28 (3.76 oz/A) + Escort (1 oz/A)+ Arsenal (10.4 oz/A) with 65% defoliation. MAT 28 at 3.76 oz/A was the worst mix with a 5% defoliation rating. A one year after treatment rating will be taken in July 2010 to determine treatment effectiveness.

TRIAL LOCATION

City: Wooster
State/Prov.: OH
Postal Code: 44691
Country: USA

Trial Status: Interim
Trial Reliability: Reliable
Initiation Date: 07/28/09
Planned Completion Date: 7/28/2010

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	CYAOV	SHAGBARK HICKORY	Carya ovata (MILL) K.KOCH

SITE AND DESIGN

Plot Width, Unit: 10 FT
Site Type: LOGGED OVER FENCE LINE
Tillage Type: NONE

Plot Length, Unit: 10 FT
Reps: 4
Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 11	% OM: 3.0	Texture: SILT LOAM
% Silt: 75	pH: 6.0	Soil Name: WOOSTER SILT LOAM
% Clay: 14	CEC: 12	Fert. Level: MODERATE

APPLICATION DESCRIPTION

	A
Application Date:	7/28/2009
Time of Day:	11AM-12PM
Application Method:	SPRAY
Application Timing:	POST
Applic. Placement:	DIRECT
Air Temp., Unit:	78.7 F
% Relative Humidity:	65.7
Wind Velocity, Unit:	4
Soil Moisture:	DRY

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HICKORY - SUCKER CONTROL USING MAT28 WITH ESCORT AND ARSENAL

Trial ID: HBRUSHMAT28W 2009
Location: Wooster, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

CROP STAGE AT EACH APPLICATION

	A
Application Timing:	POST
Stage Scale:	VEGETATIVE
Height, Unit:	4 FT

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	CYAOV, POST
Stage Scale:	FULL LEAF
Density, Unit:	MEDIUM, PLOT

APPLICATION EQUIPMENT

	A
Appl. Equipment:	BACKPACK
Operating Pressure:	40
Nozzle Type:	FLAT FAN
Nozzle Size:	8003VS
Nozzles/Row:	1
Band Width, Unit:	24 IN
Spray Volume, Unit:	25 GPA
Propellant:	CO2

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HICKORY - SUCKER CONTROL USING
MAT28 WITH ESCORT AND ARSENAL

Trial ID: HBRUSHMAT28W 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				CYAOV	CYAOV	CYAOV	CYAOV	CYAOV	CYAOV
Crop Code									
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	ALIVE	DEFOLIATION	BURN	ALIVE	DEFOLIATION
Rating Unit				%	%	%	%	%	%
Rating Date				9/14/09	9/14/09	9/14/09	10/28/09	10/28/09	10/28/09
Trt-Eval Interval				45 DAT	45 DAT	45 DAT	90 DAT	90 DAT	90 DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
UNTREATED CONTROL				0	0	0	100	0	13
MAT 28+	3.76	OZ/A	MIDSUMMER	86	14	0	100	0	65
ESCORT+	1	OZ/A	MIDSUMMER						
ARSENAL+	10.4	OZ/A	MIDSUMMER						
MSO	1	QT/A	MIDSUMMER						
MAT 28+	5.64	OZ/A	MIDSUMMER	80	20	0	100	0	14
ESCORT+	1.5	OZ/A	MIDSUMMER						
ARSENAL+	15.6	OZ/A	MIDSUMMER						
MSO	1	QT/A	MIDSUMMER						
MAT 28+	7.5	OZ/A	MIDSUMMER	80	20	0	100	0	31
ESCORT+	2	OZ/A	MIDSUMMER						
ARSENAL+	20.8	OZ/A	MIDSUMMER						
MSO	1	QT/A	MIDSUMMER						
MAT 28+	9	OZ/A	MIDSUMMER	75	25	0	100	0	14
ESCORT+	2.42	OZ/A	MIDSUMMER						
ARSENAL+	25.2	OZ/A	MIDSUMMER						
MSO	1	QT/A	MIDSUMMER						
MAT 28+	3.76	OZ/A	MIDSUMMER	63	37	0	100	0	23
ESCORT+	1	OZ/A	MIDSUMMER						
MSO	1	QT/A	MIDSUMMER						
MAT 28+	9	OZ/A	MIDSUMMER	95	5	0	100	0	39
ESCORT+	2.42	OZ/A	MIDSUMMER						
MSO	1	QT/A	MIDSUMMER						
MAT 28+	3.76	OZ/A	MIDSUMMER	40	60	0	100	0	5
MSO	1	QT/A	MIDSUMMER						
MAT 28+	9	OZ/A	MIDSUMMER	44	56	0	100	0	21
MSO	1	QT/A	MIDSUMMER						

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HICKORY - SUCKER CONTROL USING
MAT28 WITH ESCORT AND ARSENAL

Trial ID: HBRUSHMAT28W 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				CYAOV	CYAOV	CYAOV	CYAOV	CYAOV	CYAOV
Crop Code									
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	ALIVE	DEFOLIATION	BURN	ALIVE	DEFOLIATION
Rating Unit				%	%	%	%	%	%
Rating Date				9/14/09	9/14/09	9/14/09	10/28/09	10/28/09	10/28/09
Trt-Eval Interval				45 DAT	45 DAT	45 DAT	90 DAT	90 DAT	90 DAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
GARLON+	64	OZ/A	MIDSUMMER	95	5	0	100	0	45
ARSENAL+	16	OZ/A	MIDSUMMER						
MSO	1	QT/A	MIDSUMMER						
MILESTONE +	3.3	OZ/A	MIDSUMMER	82	19	0	100	0	89
ROUNDUP W/M+	52.4	OZ/A	MIDSUMMER						
ARSENAL+	6.4	OZ/A	MIDSUMMER						
NIS	1	QT/A	MIDSUMMER						
LSD (P=.05)				35	35	0	0	0	41
Standard Deviation				24	24	0	0	0	28
CV				36	103	0	0	0	87

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Objective: The objective of this experiment was to determine the impact of low rates of 2, 4-D (Weedar 64), and dicamba (Clarity), on processing tomatoes grown in Indiana and Ohio.

TRIAL SUMMARY: Results indicate that late herbicide drift, (coinciding with early bloom in processing tomatoes) from either chemical causes significant yield loss; the visible damage is low but the yield is affected. Early drift on tomatoes (from transplanting to prebloom) causes extensive visual damage but no significant yield loss. Dicamba and 2, 4-D drift from agronomic crops to tomato plants at low levels can cause visible injury at levels as low as 1/300 of the standard field rate. Weedar 64 in both timings exhibited the most visible injury in both varieties. Both herbicides caused significant yield loss at 1/30 of the standard field rate. Clarity was the most injurious followed closely by Weedar 64.

TRIAL LOCATION

City: Wooster Trial Status: Final
State/Prov.: OH Trial Reliability: Reliable
Postal Code: 44691 Initiation Date: 06/09/09
Country: USA Planned Completion Date: 09/30/09

Crop 1: LYPES TOMATO Variety: GEM 818 & GEM 611
Plant Date: 06/09/09 Planting Method: TRANSPLANTER
Rate: 1 PLANT/12 " Depth: 3 IN
Row Spacing: 6 FT Spacing Within Row: 12 IN
Soil Moisture: MOIST Seed Bed: CONVENTIONAL

SITE AND DESIGN

Plot Width, Unit: 5 FT Plot Length, Unit: 25 FT
Site Type: LEVEL FIELD Reps: 4
Tillage Type: CONVENTIONAL Study Design: SPLIT-PLOT

SOIL DESCRIPTION

% Sand: 16	% OM: 3.11	Texture: SILT LOAM
% Silt: 72	pH: 6.86	Soil Name: WOOSTER SILT LOAM
% Clay: 12	CEC: 8.5	Fert. Level: MODERATE

APPLICATION DESCRIPTION

	A	B
Application Date:	6/23/2009	7/14/2009
Time of Day:	7-8 AM	7-8 AM
Application Method:	SPRAY	SPRAY
Application Timing:	2WATP	5WATP
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	63.3 F	57.3 F
% Relative Humidity:	92.5	81.8
Wind Velocity, Unit:	0 MPH	1.7 MPH

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Soil Temp., Unit:	69.2 F	64.6 F
Soil Moisture:	MOIST	DRY
% Cloud Cover:	0	50

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	LYPES, A	LYPES, B
Stage Scale:	VEGETATIVE	BLOOM
Height, Unit:	6 IN	12 IN

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO_2 BACKPACK	CO_2 BACKPACK
Operating Pressure:	40	40
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002VS	8002VS
Nozzle Spacing, Unit:	18 IN	18 IN
Nozzles/Row:	2	2
Band Width, Unit:	36 IN	36 IN
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	2.6 MPH	2.6 MPH
Carrier:	H20	H20
Spray Volume, Unit:	25 GPA	25 GPA
Propellant:	CO2	CO2

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	STEM TWIST	LEAF CURL	STUNT	STEM TWIST	LEAF CURL
Rating Unit				%	%	%	%	%	%
Rating Date				6/26/09	6/26/09	6/26/09	6/26/09	6/30/09	6/30/09
Trt-Eval Interval				3DAT A	3DAT A	3DAT A	3DAT A	7DAT A	7DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
TIMING A UNTREATED CONTROL GEM 818			2WATP	0	0	0	0	0	0
TIMING A UNTREATED CONTROL GEM 611			2WATP	0	0	0	0	0	0
TIMING A CLARITY (1/300 X)+ AMS+ NIS GEM 818	 0.0533 2.5 0.5	 OZ/A LB/A PT/A	2WATP	0	5	3	11	0	0
TIMING A CLARITY (1/300 X)+ AMS+ NIS GEM 611	 0.0533 2.5 0.5	 OZ/A LB/A PT/A	2WATP	0	4	3	14	0	0
TIMING A CLARITY (1/100 X)+ AMS+ NIS GEM 818	 0.16 2.5 0.5	 OZ/A LB/A PT/A	2WATP	0	6	3	19	0	0
TIMING A CLARITY (1/100 X)+ AMS+ NIS GEM 611	 0.16 2.5 0.5	 OZ/A LB/A PT/A	2WATP	0	5	5	14	0	0

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	STEM TWIST	LEAF CURL	STUNT	STEM TWIST	LEAF CURL
Rating Unit				%	%	%	%	%	%
Rating Date				6/26/09	6/26/09	6/26/09	6/26/09	6/30/09	6/30/09
Trt-Eval Interval				3DAT A	3DAT A	3DAT A	3DAT A	7DAT A	7DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
TIMING A			2WATP	0	74	68	30	0	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	0	71	71	31	0	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	0	8	5	13	0	0
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	0	6	4	11	0	0
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	0	35	10	14	0	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	0	33	14	19	0	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	STEM TWIST	LEAF CURL	STUNT	STEM TWIST	LEAF CURL
Rating Unit				%	%	%	%	%	%
Rating Date				6/26/09	6/26/09	6/26/09	6/26/09	6/30/09	6/30/09
Trt-Eval Interval				3DAT A	3DAT A	3DAT A	3DAT A	7DAT A	7DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
TIMING A			2WATP	0	76	85	30	0	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A				0	80	85	38	0	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	2WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
UNTREATED CONTROL									
GEM 818									
TIMING B			5WATP						
UNTREATED CONTROL									
GEM 611									
TIMING B			5WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	STEM TWIST	LEAF CURL	STUNT	STEM TWIST	LEAF CURL
Rating Unit				%	%	%	%	%	%
Rating Date				6/26/09	6/26/09	6/26/09	6/26/09	6/30/09	6/30/09
Trt-Eval Interval				3DAT A	3DAT A	3DAT A	3DAT A	7DAT A	7DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
TIMING B			5WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				BURN	STEM TWIST	LEAF CURL	STUNT	STEM TWIST	LEAF CURL
Rating Unit				%	%	%	%	%	%
Rating Date				6/26/09	6/26/09	6/26/09	6/26/09	6/30/09	6/30/09
Trt-Eval Interval				3DAT A	3DAT A	3DAT A	3DAT A	7DAT A	7DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6
TIMING B			5WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B									
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	5WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
LSD (P=.05)				0	20	19	7	0	0
Standard Deviation				0	14	14	5	0	0
CV				0	48	54	27	0	0

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				STUNT	INJURY	INJURY	INJURY	STUNT	BLOOM REDUCTION
Rating Unit				%	%	%	%	%	%
Rating Date				6/30/09	6/30/09	7/8/09	7/13/09	7/13/09	7/13/09
Trt-Eval Interval				7DAT A	7DAT A	14DAT A	21DAT A	21DAT A	21DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
TIMING A			2WATP	0	0	0	0	0	0
UNTREATED CONTROL									
GEM 818									
TIMING A			2WATP	0	0	0	0	0	0
UNTREATED CONTROL									
GEM 611									
TIMING A			2WATP	0	14	16	29	24	15
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	0	14	15	28	26	15
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	4	16	28	41	34	98
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	4	14	28	46	38	100
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				STUNT	INJURY	INJURY	INJURY	STUNT	BLOOM REDUCTION
Rating Unit				%	%	%	%	%	%
Rating Date				6/30/09	6/30/09	7/8/09	7/13/09	7/13/09	7/13/09
Trt-Eval Interval				7DAT A	7DAT A	14DAT A	21DAT A	21DAT A	21DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
TIMING A			2WATP	8	21	43	64	65	100
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	8	23	45	73	73	100
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	0	11	9	14	11	0
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	0	13	6	11	11	0
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	10	6	23	38	39	43
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	10	9	20	41	33	43
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				STUNT	INJURY	INJURY	INJURY	STUNT	BLOOM REDUCTION
Rating Unit				%	%	%	%	%	%
Rating Date				6/30/09	6/30/09	7/8/09	7/13/09	7/13/09	7/13/09
Trt-Eval Interval				7DAT A	7DAT A	14DAT A	21DAT A	21DAT A	21DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
TIMING A			2WATP	6	20	39	64	61	100
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A				6	24	45	70	65	100
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	2WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
UNTREATED CONTROL									
GEM 818									
TIMING B			5WATP						
UNTREATED CONTROL									
GEM 611									
TIMING B			5WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				STUNT	INJURY	INJURY	INJURY	STUNT	BLOOM REDUCTION
Rating Unit				%	%	%	%	%	%
Rating Date				6/30/09	6/30/09	7/8/09	7/13/09	7/13/09	7/13/09
Trt-Eval Interval				7DAT A	7DAT A	14DAT A	21DAT A	21DAT A	21DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
TIMING B			5WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				STUNT	INJURY	INJURY	INJURY	STUNT	BLOOM REDUCTION
Rating Unit				%	%	%	%	%	%
Rating Date				6/30/09	6/30/09	7/8/09	7/13/09	7/13/09	7/13/09
Trt-Eval Interval				7DAT A	7DAT A	14DAT A	21DAT A	21DAT A	21DAT A
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	7	8	9	10	11	12
TIMING B			5WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP						
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B									
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	5WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
LSD (P=.05)				12	13	6	9	11	8
Standard Deviation				8	9	4	6	8	5
CV				205	67	19	17	22	10

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STEM TWIST	LEAF CURL	STUNT	BURN	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/13/09	8/11/09	8/11/09	8/11/09	7/17/09	7/17/09
Trt-Eval Interval				21DAT A	42DAT A	42DAT A	42DAT A	3DAT B	3DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	13	14	15	16	17	18
TIMING A			2WATP	0	0	0	0		
UNTREATED CONTROL									
GEM 818									
TIMING A			2WATP	0	0	0	0		
UNTREATED CONTROL									
GEM 611									
TIMING A			2WATP	31	0	0	6		
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	34	0	0	8		
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	49	0	0	0		
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	61	0	0	0		
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STEM TWIST	LEAF CURL	STUNT	BURN	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/13/09	8/11/09	8/11/09	8/11/09	7/17/09	7/17/09
Trt-Eval Interval				21DAT A	42DAT A	42DAT A	42DAT A	3DAT B	3DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	13	14	15	16	17	18
TIMING A			2WATP	58	0	0	0		
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	55	0	0	0		
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	8	0	0	8		
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	4	0	0	10		
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP	24	0	0	0		
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP	18	0	0	0		
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code										
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STEM TWIST	LEAF CURL	STUNT	BURN	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/13/09	8/11/09	8/11/09	8/11/09	7/17/09	7/17/09
Trt-Eval Interval				21DAT A	42DAT A	42DAT A	42DAT A	3DAT B	3DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	13	14	15	16	17	18
TIMING A			2WATP	10	0	0	0		
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A				10	0	0	0		
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	2WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP					0	0
UNTREATED CONTROL									
GEM 818									
TIMING B			5WATP					0	0
UNTREATED CONTROL									
GEM 611									
TIMING B			5WATP					0	0
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP					0	0
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STEM TWIST	LEAF CURL	STUNT	BURN	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/13/09	8/11/09	8/11/09	8/11/09	7/17/09	7/17/09
Trt-Eval Interval				21DAT A	42DAT A	42DAT A	42DAT A	3DAT B	3DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	13	14	15	16	17	18
TIMING B			5WATP					0	0
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP					0	0
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP					0	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP					0	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP					0	0
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP					0	0
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code										
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STEM TWIST	LEAF CURL	STUNT	BURN	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/13/09	8/11/09	8/11/09	8/11/09	7/17/09	7/17/09
Trt-Eval Interval				21DAT A	42DAT A	42DAT A	42DAT A	3DAT B	3DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	13	14	15	16	17	18
TIMING B			5WATP					0	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP					0	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP					0	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B								0	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	5WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
LSD (P=.05)				16	0	0	6	0	0
Standard Deviation				11	0	0	4	0	0
CV				43	0	0	183	0	0

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/17/09	7/17/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				3DAT B	3DAT B	7DAT B	7DAT B	7DAT B	14DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	19	20	21	22	23	24
TIMING A			2WATP						
UNTREATED CONTROL									
GEM 818									
TIMING A			2WATP						
UNTREATED CONTROL									
GEM 611									
TIMING A			2WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/17/09	7/17/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				3DAT B	3DAT B	7DAT B	7DAT B	7DAT B	14DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	19	20	21	22	23	24
TIMING A			2WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP						
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/17/09	7/17/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				3DAT B	3DAT B	7DAT B	7DAT B	7DAT B	14DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	19	20	21	22	23	24
TIMING A			2WATP						
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A									
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	2WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	0	0	0	0	0
UNTREATED CONTROL									
GEM 818									
TIMING B			5WATP	0	0	0	0	0	0
UNTREATED CONTROL									
GEM 611									
TIMING B			5WATP	0	1	0	5	4	0
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	1	1	0	3	0	0
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/17/09	7/17/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				3DAT B	3DAT B	7DAT B	7DAT B	7DAT B	14DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	19	20	21	22	23	24
TIMING B			5WATP	0	9	0	8	4	0
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	6	0	8	0	0
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	18	0	5	15	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	19	0	5	11	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	1	0	0	0	0
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	0	0	0	3	0
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/17/09	7/17/09	7/22/09	7/22/09	7/22/09	7/22/09
Trt-Eval Interval				3DAT B	3DAT B	7DAT B	7DAT B	7DAT B	14DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	19	20	21	22	23	24
TIMING B			5WATP	0	4	0	0	1	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	5	0	0	0	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	18	1	1	6	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B				0	21	1	0	4	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	5WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
LSD (P=.05)				1	6	1	4	4	0
Standard Deviation				1	4	1	3	3	0
CV				748	54	508	122	88	0

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Treatment Name	Product Rate	Product Rate Unit	Grow Stg	25	26	27	28	29	30
Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/22/09	7/22/09	8/5/09	8/5/09	8/5/09	8/25/09
Trt-Eval Interval				14DAT B	14DAT B	21DAT B	21DAT B	21DAT B	42DAT B
TIMING A			2WATP						
UNTREATED CONTROL									
GEM 818									
TIMING A			2WATP						
UNTREATED CONTROL									
GEM 611									
TIMING A			2WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code											
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/22/09	7/22/09	8/5/09	8/5/09	8/5/09	8/25/09
Trt-Eval Interval				14DAT B	14DAT B	21DAT B	21DAT B	21DAT B	42DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	25	26	27	28	29	30
TIMING A			2WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP						
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
2, 4, D AMINE (1/300 X)	0.084	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING A			2WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A			2WATP						
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code											
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/22/09	7/22/09	8/5/09	8/5/09	8/5/09	8/25/09
Trt-Eval Interval				14DAT B	14DAT B	21DAT B	21DAT B	21DAT B	42DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	25	26	27	28	29	30
TIMING A			2WATP						
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING A									
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	2WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	0	0	0	0	0
UNTREATED CONTROL									
GEM 818									
TIMING B			5WATP	0	0	0	0	0	0
UNTREATED CONTROL									
GEM 611									
TIMING B			5WATP	0	0	0	9	3	0
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	0	0	9	3	0
CLARITY (1/300 X)+	0.0533	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/22/09	7/22/09	8/5/09	8/5/09	8/5/09	8/25/09
Trt-Eval Interval				14DAT B	14DAT B	21DAT B	21DAT B	21DAT B	42DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	25	26	27	28	29	30
TIMING B			5WATP	0	6	1	18	13	0
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	3	0	20	14	0
CLARITY (1/100 X)+	0.16	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	20	10	26	25	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	20	8	25	25	0
CLARITY (1/30 X)+	0.53	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	0	0	0	0	0
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	0	0	0	0	0
2, 4, D AMINE (1/300 X)	0.085	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code									
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	PLANT	PLANT
Rating Data Type				LEAF CURL	STUNT	STEM TWIST	LEAF CURL	STUNT	STEM TWIST
Rating Unit				%	%	%	%	%	%
Rating Date				7/22/09	7/22/09	8/5/09	8/5/09	8/5/09	8/25/09
Trt-Eval Interval				14DAT B	14DAT B	21DAT B	21DAT B	21DAT B	42DAT B
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	25	26	27	28	29	30
TIMING B			5WATP	0	4	0	0	3	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B			5WATP	0	0	0	0	1	0
2, 4, D AMINE (1/100 X)+	0.255	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
TIMING B			5WATP	0	20	0	1	16	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A							
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 818									
TIMING B				0	19	1	3	16	0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	5WATP						
AMS+	2.5	LB/A							
NIS	0.5	PT/A							
GEM 611									
LSD (P=.05)				0	5	7	4	5	0
Standard Deviation				0	3	5	3	4	0
CV				0	49	320	35	45	0

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	FRUIT	FRUIT	FRUIT
Rating Data Type				LEAF CURL	STUNT	YIELD MKTB	YIELD MKTB	YIELD MKTB
Rating Unit				%	%	30 FRUIT	LBS/PLOT	TONS/A
Rating Date				8/25/09	8/25/09	9/23/09	9/23/09	9/23/09
Trt-Eval Interval				42DAT B	42DAT B	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	31	32	33	34	35
TIMING A			2WATP			4.6	30.3	26.4
UNTREATED CONTROL								
GEM 818								
TIMING A			2WATP			3.9	33.3	29.0
UNTREATED CONTROL								
GEM 611								
TIMING A			2WATP			4.3	31.6	27.5
CLARITY (1/300 X)+	0.0533	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING A			2WATP			4.3	30.5	26.6
CLARITY (1/300 X)+	0.0533	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
TIMING A			2WATP			3.7	34.3	29.9
CLARITY (1/100 X)+	0.16	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING A			2WATP			3.7	36.4	31.7
CLARITY (1/100 X)+	0.16	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	FRUIT	FRUIT	FRUIT
Rating Data Type				LEAF CURL	STUNT	YIELD MKTB	YIELD MKTB	YIELD MKTB
Rating Unit				%	%	30 FRUIT	LBS/PLOT	TONS/A
Rating Date				8/25/09	8/25/09	9/23/09	9/23/09	9/23/09
Trt-Eval Interval				42DAT B	42DAT B	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	31	32	33	34	35
TIMING A			2WATP			3.5	32.0	27.8
CLARITY (1/30 X)+	0.53	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING A			2WATP			3.7	31.8	27.7
CLARITY (1/30 X)+	0.53	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
TIMING A			2WATP			3.8	35.7	31.1
2, 4, D AMINE (1/300 X)	0.084	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING A			2WATP			4.1	33.2	29.0
2, 4, D AMINE (1/300 X)	0.084	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
TIMING A			2WATP			3.5	33.8	29.4
2, 4, D AMINE (1/100 X)+	0.255	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING A			2WATP			3.8	35.8	31.2
2, 4, D AMINE (1/100 X)+	0.255	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	FRUIT	FRUIT	FRUIT
Rating Data Type				LEAF CURL	STUNT	YIELD MKTB	YIELD MKTB	YIELD MKTB
Rating Unit				%	%	30 FRUIT	LBS/PLOT	TONS/A
Rating Date				8/25/09	8/25/09	9/23/09	9/23/09	9/23/09
Trt-Eval Interval				42DAT B	42DAT B	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	31	32	33	34	35
TIMING A			2WATP			3.5	30.3	26.4
2, 4, D AMINE (1/30 X)+	0.85	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING A						3.6	30.3	26.4
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	2WATP					
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
TIMING B			5WATP	0	0	4.5	33.3	29.0
UNTREATED CONTROL								
GEM 818								
TIMING B			5WATP	0	0	4.2	31.3	27.2
UNTREATED CONTROL								
GEM 611								
TIMING B			5WATP	3	0	4.1	30.3	26.4
CLARITY (1/300 X)+	0.0533	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING B			5WATP	0	0	4.4	31.8	27.7
CLARITY (1/300 X)+	0.0533	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	FRUIT	FRUIT	FRUIT
Rating Data Type				LEAF CURL	STUNT	YIELD MKTB	YIELD MKTB	YIELD MKTB
Rating Unit				%	%	30 FRUIT	LBS/PLOT	TONS/A
Rating Date				8/25/09	8/25/09	9/23/09	9/23/09	9/23/09
Trt-Eval Interval				42DAT B	42DAT B	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	31	32	33	34	35
TIMING B			5WATP	0	1	4.3	25.9	22.6
CLARITY (1/100 X)+	0.16	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING B			5WATP	0	3	4.5	30.7	26.7
CLARITY (1/100 X)+	0.16	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
TIMING B			5WATP	0	19	4.2	10.3	9.0
CLARITY (1/30 X)+	0.53	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING B			5WATP	0	19	4.0	6.7	5.9
CLARITY (1/30 X)+	0.53	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
TIMING B			5WATP	0	3	4.6	26.9	23.5
2, 4, D AMINE (1/300 X)	0.085	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING B			5WATP	0	3	4.6	27.1	23.6
2, 4, D AMINE (1/300 X)	0.085	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code								
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	FRUIT	FRUIT	FRUIT
Rating Data Type				LEAF CURL	STUNT	YIELD MKTB	YIELD MKTB	YIELD MKTB
Rating Unit				%	%	30 FRUIT	LBS/PLOT	TONS/A
Rating Date				8/25/09	8/25/09	9/23/09	9/23/09	9/23/09
Trt-Eval Interval				42DAT B	42DAT B	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	31	32	33	34	35
TIMING B			5WATP	0	0	4.4	27.1	23.6
2, 4, D AMINE (1/100 X)+	0.255	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING B			5WATP	0	1	4.7	28.1	24.5
2, 4, D AMINE (1/100 X)+	0.255	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
TIMING B			5WATP	0	0	4.7	21.8	19.0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A						
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 818								
TIMING B				3	0	4.7	20.0	17.4
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	5WATP					
AMS+	2.5	LB/A						
NIS	0.5	PT/A						
GEM 611								
LSD (P=.05)				3	3	1	7	7
Standard Deviation				2	2	0	5	5
CV				508	70	11	18	18

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				LYPES	LYPES	LYPES
Part Rated				FRUIT	FRUIT	PLANT
Rating Data Type				YIELD UNMKTB	YIELD UNMKTB	TOTAL YIELD
Rating Unit				LBS/PLOT	TONS/A	LBS/PLOT
Rating Date				9/23/09	9/23/09	9/23/09
Trt-Eval Interval				HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	39
TIMING A			2WATP	4.5	3.9	38.0
UNTREATED CONTROL						
GEM 818						
TIMING A			2WATP	3.9	3.4	40.5
UNTREATED CONTROL						
GEM 611						
TIMING A			2WATP	4.3	3.8	38.4
CLARITY (1/300 X)+	0.0533	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING A			2WATP	5.6	4.8	38.5
CLARITY (1/300 X)+	0.0533	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
TIMING A			2WATP	6.5	5.7	42.0
CLARITY (1/100 X)+	0.16	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING A			2WATP	6.5	5.6	44.9
CLARITY (1/100 X)+	0.16	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				LYPES	LYPES	LYPES
Part Rated				FRUIT	FRUIT	PLANT
Rating Data Type				YIELD UNMKTB	YIELD UNMKTB	TOTAL YIELD
Rating Unit				LBS/PLOT	TONS/A	LBS/PLOT
Rating Date				9/23/09	9/23/09	9/23/09
Trt-Eval Interval				HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	39
TIMING A			2WATP	6.6	5.7	40.1
CLARITY (1/30 X)+	0.53	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING A			2WATP	7.1	6.1	40.6
CLARITY (1/30 X)+	0.53	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
TIMING A			2WATP	4.8	4.1	43.2
2, 4, D AMINE (1/300 X)	0.084	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING A			2WATP	4.2	3.7	40.8
2, 4, D AMINE (1/300 X)	0.084	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
TIMING A			2WATP	4.6	4.0	39.9
2, 4, D AMINE (1/100 X)+	0.255	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING A			2WATP	5.4	4.7	43.7
2, 4, D AMINE (1/100 X)+	0.255	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						

The Ohio State University

TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				LYPES	LYPES	LYPES
Part Rated				FRUIT	FRUIT	PLANT
Rating Data Type				YIELD UNMKTB	YIELD UNMKTB	TOTAL YIELD
Rating Unit				LBS/PLOT	TONS/A	LBS/PLOT
Rating Date				9/23/09	9/23/09	9/23/09
Trt-Eval Interval				HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	39
TIMING A			2WATP	8.7	7.6	40.0
2, 4, D AMINE (1/30 X)+	0.85	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING A				8.2	7.2	39.4
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	2WATP			
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
TIMING B			5WATP	2.8	2.4	39.2
UNTREATED CONTROL						
GEM 818						
TIMING B			5WATP	2.9	2.6	36.7
UNTREATED CONTROL						
GEM 611						
TIMING B			5WATP	4.1	3.6	37.8
CLARITY (1/300 X)+	0.0533	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING B			5WATP	3.6	3.2	40.2
CLARITY (1/300 X)+	0.0533	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				LYPES	LYPES	LYPES
Part Rated				FRUIT	FRUIT	PLANT
Rating Data Type				YIELD UNMKTB	YIELD UNMKTB	TOTAL YIELD
Rating Unit				LBS/PLOT	TONS/A	LBS/PLOT
Rating Date				9/23/09	9/23/09	9/23/09
Trt-Eval Interval				HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	39
TIMING B			5WATP	4.6	4.0	33.3
CLARITY (1/100 X)+	0.16	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING B			5WATP	4.4	3.9	37.5
CLARITY (1/100 X)+	0.16	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
TIMING B			5WATP	22.5	19.6	37.3
CLARITY (1/30 X)+	0.53	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING B			5WATP	29.9	26.1	40.1
CLARITY (1/30 X)+	0.53	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
TIMING B			5WATP	4.2	3.7	36.3
2, 4, D AMINE (1/300 X)	0.085	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING B			5WATP	4.6	4.0	34.8
2, 4, D AMINE (1/300 X)	0.085	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						

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TOMATOES - EFFECT OF SIMULATED 2,4-D AND DICAMBA DRIFT ONTO PROCESSING TOMATOES

Trial ID: TOM24DDICAMBA 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code						
Crop Code				LYPES	LYPES	LYPES
Part Rated				FRUIT	FRUIT	PLANT
Rating Data Type				YIELD UNMKTB	YIELD UNMKTB	TOTAL YIELD
Rating Unit				LBS/PLOT	TONS/A	LBS/PLOT
Rating Date				9/23/09	9/23/09	9/23/09
Trt-Eval Interval				HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	36	37	39
TIMING B			5WATP	12.2	10.6	43.2
2, 4, D AMINE (1/100 X)+	0.255	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING B			5WATP	3.8	3.3	35.9
2, 4, D AMINE (1/100 X)+	0.255	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
TIMING B			5WATP	6.7	5.8	34.7
2, 4, D AMINE (1/30 X)+	0.85	OZ/A				
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 818						
TIMING B				3.9	3.4	28.7
2, 4, D AMINE (1/30 X)+	0.85	OZ/A	5WATP			
AMS+	2.5	LB/A				
NIS	0.5	PT/A				
GEM 611						
LSD (P=.05)				6	5	10
Standard Deviation				4	4	7
CV				65	65	18

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH GWN-3404

Trial ID: TOMWCCTGWN3404 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

Objective: To evaluate GWN-3404 for crop injury and weed contro, and also to compare it to standard tomato herbicide treatments.

TRIAL SUMMARY: GWN-3404 provided good weed control with the exception of quackgrass and carpetweed. It did cause plant stunting (44%) at 3 weeks after treatment , however the plants recovered and produced the highest yield among the four treatments.

TRIAL LOCATION

City: Wooster Trial Status: Final
State/Prov.: OH Trial Reliability: Reliable
Postal Code: 44691 Initiation Date: 06/09/09
Country:USA Planned Completion Date: 09/30/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1	AGRASS	foxtail, crabgrass spp.	*Setaria, Digitaria spp.*
2	AGGRE	quackgrass	*Elytrigia repens (L.) nevski*
3	CHEAL	common lambsquarters	*Chenopodium album L.*
4	MOLVE	carpetweed	*Mollugo verticllata L*
5	POROL	common purslane	*Portulaca oleracea L.*

Crop 1: LYPES PROCESSING TOMATO Variety: GEM 818
Planting Date: 06/09/09 Planting Method: MACHINE
Rate: 1 PLANT/12" Depth: 2 IN
Row Spacing: 5 FT Spacing Within Row: 12 IN

SITE AND DESIGN

Plot Width, Unit: 7 FT Plot Length, Unit: 25 FT
Site Type: LEVEL FIELD Reps: 4
Tillage Type: CONVENTIONAL Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 11 % OM: 3.11 Texture: SILT LOAM
% Silt: 75 pH: 6.4 Soil Name: WOOSTER SILT LOAM
% Clay: 14 CEC: 8.4 Fert. Level: MODERATE

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH GWN-3404

Trial ID: TOMWCCTGWN3404 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

APPLICATION DESCRIPTION

	A	B
Application Date:	6/9/2009	6/23/2009
Time of Day:	3 PM	8:30 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	POST
Applic. Placement:	BROADCAST	BROADCAST
Air Temp., Unit:	79.3 F	72.1 F
% Relative Humidity:	59.7	75.7
Wind Velocity, Unit:	7.9 MPH	0.7 MPH
Soil Temp., Unit:	77.3 F	69.8 F
Soil Moisture:	MOIST	MOIST
% Cloud Cover:	50	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	LYPE, PRE	LYPES, POST
Stage Scale:	.	VEGETATIVE
Height, Unit:	0. .	6-7 IN

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	AGRASS, PRE	AGRASS, POST
Stage Scale:	.	.
Density, Unit:	. .	. .
Weed 2 Code, Stage:	AGGRE, PRE	AGGRE, POST
Stage Scale:	.	.
Density, Unit:	. .	. .
Weed 3 Code, Stage:	CHEAL, PRE	CHEAL, POST
Stage Scale:	.	.
Density, Unit:	. .	. .
Weed 4 Code, Stage:	MOLVE, PRE	MOLVE, POST
Stage Scale:	.	.
Density, Unit:	. .	. .
Weed 5 Code, Stage:	POROL, PRE	POROL, POST
Stage Scale:	.	.
Density, Unit:	. .	. .

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH GWN-3404

Trial ID: TOMWCCTGWN3404 2009 Study Dir.: Doug Doohan and Tim Koch
Location: Wooster, Ohio Investigator: Doug Doohan

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	40	40
Nozzle Type:	FLAT FAN	FLAT FAN
Nozzle Size:	8002VS	8002VS
Nozzle Spacing, Unit:	15 IN	15 IN
Nozzles/Row:	4	4
Band Width, Unit:	6 FT	6 FT
Boom Height, Unit:	18 IN	18 IN
Ground Speed, Unit:	2.5 MPH	2.5 MPH
Spray Volume, Unit:	25 GPA	25 GPA
Propellant:	CO2	CO2

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH GWN-3404

Trial ID: TOMWCCTGWN3404 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code						AGRASS	CHEAL	MOLVE	POROL	AGGRE
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	WEED	WEED	WEED	WEED	WEED
Rating Data Type				CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				6/30/09	6/30/09	6/30/09	6/30/09	6/30/09	6/30/09	6/30/09
Trt-Eval Interval				1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT	1 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	8
UNTREATED CONTROL				0	0	0	0	0	0	0
DUAL MAGNUM	0.66	PT/A	PRE	0	13	100	80	95	100	100
SANDEA+	0.66	OZ/A	POST							
NIS	0.5	PT/A	POST							
DUAL MAGNUM	0.66	PT/A	PRE	5	29	100	100	100	100	94
GWN-3404+	0.66	OZ/A	POST							
NIS	0.5	PT/A	POST							
DUAL MAGNUM+	1.33	PT/A	PRE	0	6	100	100	100	100	100
SENCOR	10	OZ/A	PPI							
LSD (P=.05)				0	3	0	7	5	0	4
Standard Deviation				0	2	0	5	3	0	2
CV				0	16	0	7	4	0	3

The Ohio State University

TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH GWN-3404

Trial ID: TOMWCCTGWN3404 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code							AGRASS	CHEAL	MOLVE
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	WEED	WEED	WEED
Rating Data Type				CHLOROSIS	STUNT	BLOOM REDUCTION	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%
Rating Date				7/13/09	7/13/09	7/13/09	7/13/09	7/13/09	7/13/09
Trt-Eval Interval				3 WAT	3 WAT	3 WAT	3 WAT	3 WAT	3 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	9	10	11	12	13	14
UNTREATED CONTROL				0	0	0	23	0	0
DUAL MAGNUM	0.66	PT/A	PRE	0	24	0	100	75	84
SANDEA+	0.66	OZ/A	POST						
NIS	0.5	PT/A	POST						
DUAL MAGNUM	0.66	PT/A	PRE	0	44	18	99	99	89
GWN-3404+	0.66	OZ/A	POST						
NIS	0.5	PT/A	POST						
DUAL MAGNUM+	1.33	PT/A	PRE	0	10	0	99	90	99
SENCOR	10	OZ/A	PPI						
LSD (P=.05)				0	7	8	36	7	8
Standard Deviation				0	5	5	22	5	5
CV				0	23	119	28	7	7

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH GWN-3404

Trial ID: TOMWCCTGWN3404 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				POROL	AGGRE			AGRASS	CHEAL	MOLVE
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				WEED	WEED	PLANT	PLANT	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%
Rating Date				7/13/09	7/13/09	8/4/09	8/4/09	8/4/09	8/4/09	8/4/09
Trt-Eval Interval				3 WAT	3 WAT	6 WAT	6 WAT	6 WAT	6 WAT	6 WAT
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	15	16	17	18	19	20	21
UNTREATED CONTROL				0	0	0	0	0	0	0
DUAL MAGNUM	0.66	PT/A	PRE	86	95	0	0	98	50	0
SANDEA+	0.66	OZ/A	POST							
NIS	0.5	PT/A	POST							
DUAL MAGNUM	0.66	PT/A	PRE	99	79	0	0	98	93	40
GWN-3404+	0.66	OZ/A	POST							
NIS	0.5	PT/A	POST							
DUAL MAGNUM+	1.33	PT/A	PRE	99	100	0	3	99	89	99
SENCOR	10	OZ/A	PPI							
LSD (P=.05)				8	17	0	4	2	9	39
Standard Deviation				5	10	0	3	1	6	24
CV				7	15	0	400	2	10	70

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH GWN-3404

Trial ID: TOMWCCTGWN3404 2009
Location: Wooster, Ohio
Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Weed Code				POROL	AGGRE			
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				WEED	WEED	FRUIT	FRUIT	FRUIT
Rating Data Type				CONTROL	CONTROL	TOTAL YIELD	YIELD MKTB	YIELD UNMKTB
Rating Unit				%	%	LBS/PLOT	LBS/PLOT	LBS/PLOT
Rating Date				8/4/09	8/4/09	10/1/09	10/1/09	10/1/09
Trt-Eval Interval				6 WAT	6 WAT	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	22	23	24	25	26
UNTREATED CONTROL				0	0	20.9	17.3	0.8
DUAL MAGNUM	0.66	PT/A	PRE	0	75	30.8	26.1	2.4
SANDEA+	0.66	OZ/A	POST					
NIS	0.5	PT/A	POST					
DUAL MAGNUM	0.66	PT/A	PRE	99	0	42.1	35.9	4.2
GWN-3404+	0.66	OZ/A	POST					
NIS	0.5	PT/A	POST					
DUAL MAGNUM+	1.33	PT/A	PRE	99	77	40.2	33.3	3.5
SENCOR	10	OZ/A	PPI					
LSD (P=.05)				0	15	13	13	3
Standard Deviation				0	9	8	8	2
CV				0	24	24	29	66

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: TOMWCCTREFLEXF 2009
Location: Fremont, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

Objective: Determine tomato tolerance to Reflex applied pre-transplant (PRETP) compared to local herbicide standards, and evaluate efficacy of Reflex +/- Dual applied to tomato prior to transplanting compared to local herbicide.

TRIAL SUMMARY: Two processing varieties were used; Peto 696 and OX 325. There was significant stunting (< 20%) observed at 7-28 days after transplanting with both varieties. This injury occurred at the 48 fl oz/A rate as well as the 16 and 24 fluid oz/A Reflex/Dual Magnum tank mixes. This early injury did not translate into any significant yield loss. The two Dual Magnum /Reflex tank mixes provided higher yields and better weed control (especially common purslane) over the standard Dual Magnum/Sencor treatment and the solo Reflex treatments.

TRIAL LOCATION

City: Fremont
State/Prov.: Ohio
Postal Code: 43420
Country: USA

Trial Status: Final
Trial Reliability: Reliable
Initiation Date: 06/04/09
Planned Completion Date: 09/30/09

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
	1 AGRASS	foxtail, crabgrass spp.	*Setaria, Digitaria spp*
	2 AMAXX	pigweed spp.	*Amaranthus spp.*
	3 CHEAL	common lambsquarters	*Chenopodium album L.*
	4 POROL	common purslane	*Potulaca oleracea L.*

Crop 1: LYPES TOMATO
Plant Date: 06/05/09
Rate: 1 PLANT/12"
Row Spacing: 5 FT
Soil Temperature: 59 F
Soil Moisture: DRY

Variety: PETO 696, OX 325
Planting Method: CONVENTIONAL
Depth: 2 IN
Seed Bed: CONVENTIONAL
Spacing Within Row: 12 IN

SITE AND DESIGN

Plot Width, Unit: 5 FT
Site Type: LEVEL FIELD
Tillage Type: CONVENTIONAL

Plot Length, Unit: 25 FT
Reps: Reps
Study Design: SPLIT-PLOT

SOIL DESCRIPTION

% Sand: 20
% Silt: 41
% Clay: 39

% OM: 4.4
pH: 6.6
CEC: 27

Texture: SILTY CLAY LOAM
Soil Name: HOYTVILLE
Fert. Level: MODERATE

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TOMATOES - WEED CONTROL AND CROP TOLERANCE WITH REFLEX

Trial ID: TOMWCCTREFLEXF 2009
Location: Fremont, Ohio

Study Dir.: Doug Doohan and Tim Koch
Investigator: Doug Doohan

APPLICATION DESCRIPTION

	A
Application Date:	6/4/2009
Time of Day:	11AM-1PM
Application Method:	SPRAY
Application Timing:	PRETRANSPLANT
Applic. Placement:	BROADCAST
Air Temp., Unit:	60 F
% Relative Humidity:	63.1
Wind Velocity, Unit:	6.5 MPH
Soil Moisture:	DRY
% Cloud Cover:	0

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	LYPES, PRETP
Stage Scale:	.
Height, Unit:	0. .

WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	AGRAS, PRETP
Stage Scale:	.
Density, Unit:	. .
Weed 2 Code, Stage:	CHEAL, PRETP
Stage Scale:	.
Density, Unit:	. .
Weed 3 Code, Stage:	AMAXX, PRETP
Stage Scale:	.
Density, Unit:	. .
Weed 4 Code, Stage:	POROL, PRETP
Stage Scale:	.
Density, Unit:	. .

APPLICATION EQUIPMENT

	A
Operating Pressure:	40 PSI
Nozzle Type:	FLAT FAN
Nozzle Size:	8002VS
Nozzle Spacing, Unit:	15 IN
Nozzles/Row:	4
Band Width, Unit:	60 IN
Boom Height, Unit:	18 IN
Ground Speed, Unit:	3.1 MPH
Spray Volume, Unit:	25 GPA
Propellant:	CO2

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Weed Code								AGRASS	CHEAL	POROL	
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	WEED	WEED	WEED	PLANT
Rating Data Type				CHLOROSIS	STUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	STUNT
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				6/12/09	6/12/09	6/18/09	6/18/09	6/18/09	6/18/09	6/18/09	7/2/09
Trt-Eval Interval				7 DATP	7 DATP	14 DATP	14 DATP	14 DATP	14 DATP	14 DATP	28 DATP
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7	8
PETO 696				0	0	0	0	0	0	0	0
UNTREATED CONTROL											
PETO 696				0	0	0	0	100	100	100	0
WEED FREE CONTROL											
PETO 696				0	0	0	0	0	38	60	0
REFLEX	16	FL OZ/A	PRETP								
PETO 696				0	0	0	0	20	35	64	0
REFLEX	20	FL OZ/A	PRETP								
PETO 696				0	3	0	1	0	46	73	0
REFLEX	24	FL OZ/A	PRETP								
PETO 696				0	1	0	0	40	60	78	0
REFLEX	32	FL OZ/A	PRETP								
PETO 696				0	5	0	1	43	60	84	10
REFLEX	48	FL OZ/A	PRETP								
PETO 696				0	8	0	1	93	69	90	3
REFLEX+	16	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
PETO 696				0	14	0	5	91	65	88	11
REFLEX+	24	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
PETO 696				0	4	0	0	93	54	85	0
DUAL MAGNUM+	1.33	PT/A	PRETP								
SENCOR	1	PT/A	PRETP								
OX 325				0	0	0	0	0	0	0	0
UNTREATED CONTROL											

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Weed Code								AGRASS	CHEAL	POROL	
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				PLANT	PLANT	PLANT	PLANT	WEED	WEED	WEED	PLANT
Rating Data Type				CHLOROSIS	STUNT	CHLOROSIS	STUNT	CONTROL	CONTROL	CONTROL	STUNT
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				6/12/09	6/12/09	6/18/09	6/18/09	6/18/09	6/18/09	6/18/09	7/2/09
Trt-Eval Interval				7 DATP	7 DATP	14 DATP	14 DATP	14 DATP	14 DATP	14 DATP	28 DATP
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	1	2	3	4	5	6	7	8
OX 325				0	0	0	0	75	75	75	0
WEED FREE CONTROL											
OX 325				0	0	0	0	0	56	45	0
REFLEX	16	FL OZ/A	PRETP								
OX 325				0	0	0	0	43	49	43	0
REFLEX	20	FL OZ/A	PRETP								
OX 325				0	6	0	0	20	45	60	5
REFLEX	24	FL OZ/A	PRETP								
OX 325				0	6	0	0	56	66	63	0
REFLEX	32	FL OZ/A	PRETP								
OX 325				0	13	0	4	64	63	91	4
REFLEX	48	FL OZ/A	PRETP								
OX 325				0	14	0	4	88	66	89	5
REFLEX+	16	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
OX 325				0	18	0	6	93	64	94	5
REFLEX+	24	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
OX 325				0	0	0	3	70	61	94	0
DUAL MAGNUM+	1.33	PT/A	PRETP								
SENCOR	1	PT/A	PRETP								
LSD (P=.05)				0	7	0	3	38	30	24	6
Standard Deviation				0	5	0	2	27	21	17	4
CV				0	106	0	187	55	40	25	199

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Weed Code				AGRASS	CHEAL	AMAXX	POROL		AGRASS	CHEAL	AMAXX
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				WEED	WEED	WEED	WEED	PLANT	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	STUNT	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				7/2/09	7/2/09	7/2/09	7/2/09	7/16/09	7/16/09	7/16/09	7/16/09
Trt-Eval Interval				28 DATP	28 DATP	28 DATP	28 DATP	42 DATP	42 DATP	42 DATP	42 DATP
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	9	10	11	12	13	14	15	16
PETO 696				0	0	0	0	0	0	0	0
UNTREATED CONTROL											
PETO 696				100	100	100	100	0	100	100	100
WEED FREE CONTROL											
PETO 696				0	0	25	13	0	0	0	0
REFLEX	16	FL OZ/A	PRETP								
PETO 696				5	25	74	33	0	18	25	24
REFLEX	20	FL OZ/A	PRETP								
PETO 696				0	0	50	8	0	6	0	50
REFLEX	24	FL OZ/A	PRETP								
PETO 696				33	41	92	50	0	49	25	49
REFLEX	32	FL OZ/A	PRETP								
PETO 696				54	70	99	66	0	30	23	74
REFLEX	48	FL OZ/A	PRETP								
PETO 696				94	47	99	92	0	69	47	75
REFLEX+	16	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
PETO 696				93	31	99	92	0	64	20	74
REFLEX+	24	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
PETO 696				94	0	99	75	0	65	0	74
DUAL MAGNUM+	1.33	PT/A	PRETP								
SENCOR	1	PT/A	PRETP								
OX 325				0	0	0	0	0	0	0	0
UNTREATED CONTROL											

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Weed Code				AGRASS	CHEAL	AMAXX	POROL		AGRASS	CHEAL	AMAXX
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				WEED	WEED	WEED	WEED	PLANT	WEED	WEED	WEED
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	STUNT	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Rating Date				7/2/09	7/2/09	7/2/09	7/2/09	7/16/09	7/16/09	7/16/09	7/16/09
Trt-Eval Interval				28 DATP	28 DATP	28 DATP	28 DATP	42 DATP	42 DATP	42 DATP	42 DATP
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	9	10	11	12	13	14	15	16
OX 325				100	100	100	100	0	100	100	100
WEED FREE CONTROL											
OX 325				0	0	25	0	0	5	20	25
REFLEX	16	FL OZ/A	PRETP								
OX 325				26	0	50	41	0	14	0	25
REFLEX	20	FL OZ/A	PRETP								
OX 325				5	18	79	35	0	5	20	25
REFLEX	24	FL OZ/A	PRETP								
OX 325				34	35	99	75	0	20	19	98
REFLEX	32	FL OZ/A	PRETP								
OX 325				83	85	99	92	0	75	5	98
REFLEX	48	FL OZ/A	PRETP								
OX 325				88	63	99	85	0	83	18	98
REFLEX+	16	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
OX 325				86	65	99	86	0	88	18	98
REFLEX+	24	FL OZ/A	PRETP								
DUAL MAGNUM	16	FL OZ/A	PRETP								
OX 325				94	45	97	79	0	85	20	98
DUAL MAGNUM+	1.33	PT/A	PRETP								
SENCOR	1	PT/A	PRETP								
LSD (P=.05)				26	41	36	33	0	31	37	46
Standard Deviation				18	29	26	23	0	22	26	32
CV				37	79	34	42	0	50	115	55

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Weed Code				POROL				
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				WEED	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				CONTROL	TOTAL YIELD	50 FRUIT	YIELD MKTB	YIELD UNMKTB
Rating Unit				%	LBS/PLOT	WT/LBS	LBS/PLOT	LBS/PLOT
Rating Date				7/16/09	9/16/09	9/16/09	9/16/09	9/16/09
Trt-Eval Interval				42 DATP	HARVEST	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	17	18	19	20	21
PETO 696				0	24.7	6.1	22.2	1.1
UNTREATED CONTROL								
PETO 696				100	40.2	7.6	36.1	2.8
WEED FREE CONTROL								
PETO 696				0	27.7	7	23.2	3
REFLEX	16	FL OZ/A	PRETP					
PETO 696				17.5	23.9	6.5	21.1	1.3
REFLEX	20	FL OZ/A	PRETP					
PETO 696				28.8	27.7	7.3	24.4	1.9
REFLEX	24	FL OZ/A	PRETP					
PETO 696				62.5	31.8	7.5	28.2	1.9
REFLEX	32	FL OZ/A	PRETP					
PETO 696				77.5	28.5	6.4	25.5	1.6
REFLEX	48	FL OZ/A	PRETP					
PETO 696				93.5	35	7.4	30.8	2.8
REFLEX+	16	FL OZ/A	PRETP					
DUAL MAGNUM	16	FL OZ/A	PRETP					
PETO 696				91	37.2	6.8	32.2	3.5
REFLEX+	24	FL OZ/A	PRETP					
DUAL MAGNUM	16	FL OZ/A	PRETP					
PETO 696				76.3	31	6.3	27.3	2.5
DUAL MAGNUM+	1.33	PT/A	PRETP					
SENCOR	1	PT/A	PRETP					
OX 325				0	16.1	9.6	8.9	1.2
UNTREATED CONTROL								

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Weed Code				POROL				
Crop Code				LYPES	LYPES	LYPES	LYPES	LYPES
Part Rated				WEED	FRUIT	FRUIT	FRUIT	FRUIT
Rating Data Type				CONTROL	TOTAL YIELD	50 FRUIT	YIELD MKTB	YIELD UNMKTB
Rating Unit				%	LBS/PLOT	WT/LBS	LBS/PLOT	LBS/PLOT
Rating Date				7/16/09	9/16/09	9/16/09	9/16/09	9/16/09
Trt-Eval Interval				42 DATP	HARVEST	HARVEST	HARVEST	HARVEST
Treatment Name	Product Rate	Product Rate Unit	Grow Stg	17	18	19	20	21
OX 325				100	27	7.9	21	5.1
WEED FREE CONTROL								
OX 325				22.5	21.6	6.2	18.1	2.2
REFLEX	16	FL OZ/A	PRETP					
OX 325				20	19.7	7.3	14.2	2.4
REFLEX	20	FL OZ/A	PRETP					
OX 325				42.5	18.7	6.3	15	2.7
REFLEX	24	FL OZ/A	PRETP					
OX 325				65	20.5	7.1	17.1	2.4
REFLEX	32	FL OZ/A	PRETP					
OX 325				85	23.6	7.2	19.6	3.2
REFLEX	48	FL OZ/A	PRETP					
OX 325				81.3	26.2	7.6	18.3	7.2
REFLEX+	16	FL OZ/A	PRETP					
DUAL MAGNUM	16	FL OZ/A	PRETP					
OX 325				86.3	30.8	7.8	24.1	5.6
REFLEX+	24	FL OZ/A	PRETP					
DUAL MAGNUM	16	FL OZ/A	PRETP					
OX 325				81.3	31.6	7.2	26.3	4.3
DUAL MAGNUM+	1.33	PT/A	PRETP					
SENCOR	1	PT/A	PRETP					
LSD (P=.05)				36	12	3	10	3
Standard Deviation				25	9	2	7	2
CV				45	31	30	31	61